

CERF HRTC Meeting
May 26, 2023
8:30 to 10:00am
Zoom Video Conferencing

<https://us02web.zoom.us/j/86993468590?pwd=bkRibjZGaCtoSVFZMTNxNEtwN2ZJdz09>

Webinar ID:
869 9346 8590

AGENDA

1. **Call to Order** (Ish Herrera)
2. **Public Comments** (Ish Herrera)
3. **HRTC Member Comments** (Ish Herrera)
4. **HRTC Meetings Update** (Ish Herrera)
 - **VOTING ITEM- CONSIDERATION FOR APPROVAL:**
 - *Modify HRTC meetings to 90 minutes instead of the currently scheduled 60 minutes*
5. **Disinvested Communities Breakdown** (Jesse Ben-Ron)
6. **Approval of Disinvested Communities Members** (Sarah Middleton)
7. **Updates from State's Community of Practice/Modification of Timeline** (Jesse Ben-Ron)
8. **Research** (Dr. Wallace Walrod)
 - A. ESRI CERF Data Portal (Brian McNamara)
 - B. [Sustainability/Environmental Justice](#) (Alex Reed)
 - C. Public Health Analysis (Dr. Marlon Boarnet)
 - D. Climate and Environmental Impact Analysis (Dr. Marlon Boarnet)
 - E. SWOT Analysis (Dr. Wallace Walrod)
9. **Next HRTC Meeting**
 - **Friday, June 30, 2023**
 - a. **Review Stakeholder Mapping and draft of the regional plan.**
10. **Adjourn**

Disinvested Communities Representatives	Non-Disinvested Communities Representatives
Orange County Hispanic Chamber of Commerce	CEO Leadership Alliance Orange County
OC Black Chamber of Commerce	Greater Irvine Chamber
Cogstone/Gabrielino Tongva	Cox Business
Payomkawichum Kaamalam	SoCal Gas
American Indian Chamber of Commerce of California	Bloom Energy
United Way of Orange County	Orange County Business Council
The Kennedy Commission	Octane
OCAPICA	CSUF Center for Entrepreneurship
Community Action Partnership of Orange County	Sustain SoCal
Latino Health Access	Orange County Department of Education
OCCORD	Concordia University Irvine
The Cambodian Family Community Center	UMass Global
Family Assistance Ministries	Chapman University
THRIVE Santa Ana	California State University, Fullerton
Jamboree Housing	University of California, Irvine
Cielo	Irvine Valley College
Cooperacion Santa Ana	North Orange County Community College District
City of Santa Ana	Climate Action Campaign
City of Garden Grove	Orange County Coastkeeper
First 5 Orange County	Sunrise Movement Orange County
Orange Workforce Alliance	Citizens Climate Lobby
OC Labor Federation	Banning Ranch Conservancy
International Association of Machinists and Aerospace Workers	Southern California Association of Governments
International Brotherhood of Electrical Workers	League of California Cities OC
LA/OC Building and Construction Trades	Orange County Community Foundation
UA Local Union 250	
Iron Workers Local 416	
Iron Workers Local 433	
Boilermakers 92`	
Plumbers & Steamfitters, Local 582	
Sheet Metal Workers Local 105	
UNITE HERE Local 11	
OC Grantmakers	
Charitable Ventures	
Orange County Community Foundation	
Chrysalis	
OC Conservation Corps	
Hope Builders	
Goodwill of Orange County	
Vital Link	
Hospitality Training Academy	
Total: 41	Total: 25
62.12%	

Disinvested Community Members Selected to Join the HRTC by Review Committee

The Disinvested Community Member Review Committee is recommending that the HRTC vote the following 8 individuals as new HRTC members. Bios on each of these individuals have been drawn from their HRTC applications.

1. Donia Alkayali
2. Apolonio Cortes
3. Vu Tuan Phung
4. Sarah Riggs
5. Karen Sarabia
6. Sokollin Tes
7. Maria Guadalupe Villa Vasquez
8. Johnice Williams
9. Alternate: Tung Chau Lu (should Vu Tuan Phung not be able to participate)

1. Donia Alkayali, Fountain Valley (temporary)

Born in Orange County, Donia Alkayali is 23 years old. When she was three, her father quit his job to tend to her sick grandfather, who soon died. That same year, her mom walked out on the family. At four, her maternal grandparents both died. In 2006, Donia's father remarried and also received a job offer in Qatar, so the family moved to the Middle East. In 2017, Donia's father passed away. After her father's death, Donia returned to Orange County and moved around to various family members' homes while completing school and going to college. She does not have a permanent home at this time.

Donia is an aerospace engineering major at UCI and will graduate in June. She has done a lot of volunteering through Access California Services, and she is excited to contribute to the Orange County HRTC.

2. Apolonio Cortes, Santa Ana

Apolonio Cortes is a resident of Santa Ana, originally from the state of Guerrero, Mexico. He has lived in Orange County for 25 years. About 12 years ago, he began to get involved in his community, specifically to help find solutions to community problems. There are different issues in Santa Ana that affect the community, especially around housing. The rents are very expensive.

Apolonio's income has never been enough to pay the rent, and this means that he has always had to share space with multiple people. He sees many families with small children who have nowhere to do their homework, go out to play, etc. Apolonio understands that this environment eventually affects people and can sometimes bring trauma.

In 2010, Apolonio joined the SACReD movement -- Santa Ana Collaborative for Responsible Development -- to help draft an ordinance called the Sunshine Ordinance, which was finally approved by the Council in 2012. He has been involved with Santa Ana Building Healthy Communities, with campaigns such as the

Wellness Corridor, and with the City of Santa Ana Strategic Plan. More recently, he was part of community efforts to update the City of Santa Ana's General Plan.

Apolonio is part of the THRIVE Santa Ana community land trust, and has discussed CERF in that context. He is motivated to expose the situations that are lived in the community, so that our region can invest in housing and other resources.

3. Vu Tuan Phung, Garden Grove

Vu Tuan Phung has lived in Orange County for 15 years and has two daughters and a son, ages 16, 13 and 7. He tries his best to provide for his wife and three children. His father recently passed away and now he's caring for his mother. Vu is self-employed and shared that it was challenging to collect income during the COVID-19 pandemic. Even now there are challenges and his family is living paycheck to paycheck.

Vu learned about this HRTC opportunity through his daughter's therapist. As a system-impacted individual, he has struggled to find work at times. He hopes insight into his life and the barriers he faced will help Orange County CERF meet its goals.

4. Sarah Riggs, Anaheim

Sarah is 26 years old and a mother of two daughters, 5 and 3. She grew up in a single mother home and experienced poverty. As a youth, Sarah moved around multiple times, at times living in motels. Despite unstable living conditions, in high school, she enrolled herself in band, played multiple instruments, participated in various sports, and joined clubs. She also pushed myself to be in honors and AP courses. She volunteered at her local church and schools to help children in high school.

Sarah is a survivor of domestic violence. She left her daughters' father and moved to Anaheim. She's now a part-time job coach (vocational specialist) for disabled adults.

Sarah learned about this HRTC opportunity through Upscale Orange County, of which she is part. As a mom and a DV survivor, Sarah has counseled other women and moms, and often refers women to Horizon Pregnancy Center and other community resources.

Sarah is looking forward to investing her experiences, perspectives, and advocacy for the HRTC and Orange County as a whole.

5. Karen Sarabia, Anaheim

Karen Sarabia is a Mexican immigrant who was brought to the US at a young age. She has lived in Orange County for 20 years, and has frequently encountered systemic barriers.

For many years, Karen was unable to apply for jobs at the places she wanted due to her legal status. She often took underpaid jobs that didn't require documentation. As an undocumented immigrant, Karen was not eligible for any health care benefits covered by public funding. She could access preventive care only if she were willing to cover the costs.

In terms of education, as an undocumented student, Karen was ineligible to apply for in-state college tuition and scholarships and loans were limited. With deferred action approval (Dream Act) in 2012, she

was able to obtain a work permit that must be renewed every two years; this temporary protection allowed for new opportunities but still with limited rights.

During COVID-19, she was a community health worker with Latino Health Access. She was hired as an Outreach and Education Coordinator by LHA in June 2020 to develop and implement a health prevention campaign for the most vulnerable communities.

Karen is currently a member of Radiate Consulting Cooperative and is enrolled in a Master's in Public Health program with an emphasis on Arts in Health. She is involved in initiatives that use the power of arts as a tool to create cross-sector collaborations aimed at community improvement and transformation.

As a young immigrant professional, Karen is interested in participating in and contributing to the CERF Orange County planning process.

6. Sokollin Tes, Santa Ana

Sokollin Tes is a Cambodian American who has been living in Orange County for about 7 years. She is currently unemployed and attending Adult School in Santa Ana. She struggles to find a good-paying job in Orange County due to language access.

Sokollin learned about the HRTC opportunity from The Cambodian Family Community Center. At The Cambodian Family, she has been involved in many outreach initiatives, including breast cancer and mental health community health events, among others. She is also one of The Cambodian Family's trained community health ambassadors and advocates.

She is looking forward to being part of the HRTC and improving the economy in Orange County. She is aware of many younger people applying for jobs in other counties. Through CERF, she would like to share her voice to help create solutions for more good-paying jobs and a stronger environment in Orange County.

7. Maria Guadalupe Villa Vasquez, San Juan Capistrano

Maria Guadalupe Villa Vasquez arrived in Orange County in 2000. She is married with four children who are now in college, high school, middle, and elementary school. When she arrived in the US, she began putting a lot of effort into the education of her children. She's always been interested in participating in educational programs and about learning how to support her children's education. All of Lupe's children have been students with Breakthrough San Juan Capistrano, a college access program for first generation students.

Lupe works a few days a week cleaning houses. Her husband is a gardener.

Lupe enjoys being engaged with nonprofits, and learned about the HRTC opportunity from Unidos South OC, for whom she is a volunteer. Lupe would like to serve on the HRTC, even though it sounds scary to her, because she likes to be involved in these kinds of community initiatives.

Lupe is always helping at her children's schools and at Breakthrough. She recently signed up to be on the elementary school's PTA. She also volunteers with the Community Leader Coalition of the Capistrano Villas (CLC). With the CLC, Lupe visited City Hall and met with city officials to share her perspective on high housing costs. At a different time, she had the opportunity to meet with the police chief, and she

enjoyed the trust-building that came with that – learning about her rights and how to report crimes without being afraid.

Lupe enjoys volunteering with Unidos, and she feels good about building programs for youth, so that youth don't spend so much time in the street, especially the kids whose parents are at work.

During COVID, Lupe prepared soup for neighbors, those who were homeless and had no work. She described it as a beautiful experience because she and the other volunteers felt like leaders, helping their community. For nine weeks at the beginning of the pandemic, they served 100 servings of soup every day. Lupe and the others then instituted a grocery distribution program, which ran for 18 months. Lupe was there every week. She also helped to run two COVID vaccine and two flu clinics in her neighborhood, and ran a cash aid program for her community during the pandemic.

Lupe is motivated to learn more about how she can help her community. She wants to help others have more opportunities, so their children will grow to be successful. She is driven to create a better world for children and youth, and looks forward to serving on the HRTC.

8. Johnice Williams, Anaheim

Johnice Williams moved to California from Illinois in 1986, left for Florida in 2001, and returned to California in 2014. She has PTSD, depression, anxiety, and is a four-time cancer survivor. For 11 years, Johnice got around Orange County on public transportation. She is currently a student at Saddleback College, working on her certification for Mental Health Worker and Alcohol and Drug Studies. She is a peer and peer advocate in the behavioral health and Black/African American communities. Her passion is to help peers and their families and caregivers navigate the behavioral health services and systems, and make sure their voice is heard in the community.

Johnice is a member of the Health Equity for African Americans League Collective (HEAAL). After receiving a Population Health Equity grant through Equity in OC in June 2022, HEAAL plays a key role in identifying social determinants of health, providing education, and actively advocating and influencing decision-making in local, state, and federal organizations.

Johnice serves as Peer and Community Engagement Coordinator for Be Well Orange County. With her past involvement as co-founder of Peer Voices of Orange County, she possesses both executive and frontline experience providing peer support services for Hope for Orange County, FEMA, and other initiatives in the wake of the COVID-19 pandemic. Johnice serves on a number of Boards, including the Extraordinary Lives Foundation, the Behavioral Health Equity Committee here in Orange County, and Christ Church Unity of Anaheim, among others.

9. Alternate: Tung Chau Lu, Garden Grove

Tung Chau Lu lives in one bedroom and living room with his family, which includes his mom, wife, and three sons. He works part-time and cannot access affordable housing options.

Tung learned about this HRTC opportunity from OCAPICA; Tung and his child are participants in OCAPICA's Project FOCUS.

Tung has lived in Orange County for 10 years and his preferred language is Vietnamese.

CERF Orange County

Identifying Disinvested Community Members to Join the HRTC

May 26, 2023

March to May

With appreciation for Cooperacion Santa Ana, Family Assistance Ministries (FAM), OC United Way, The Cambodian Family, The Kennedy Commission, and THRIVE Santa Ana

Our timeline looked like this 

Month	Activity
March	Application development
April	Meeting; application refinement; scoresheet development
May	Application window opens; review process

59 Applications Received

Grading Criteria:

1. Applicant lives in a disinvested community
2. Applicant's household income reflects very and extremely low-income levels
3. Applicant's racial/ethnic identity reflects disinvested communities
4. Applicant's preferred language reflects disinvested communities
5. Applicant's workforce experience is of relevance to CERF mission and goals
6. Applicant's lived experience of historically marginalized identities provides an irreplaceable understanding and appreciation of the challenges disinvested communities face
7. Applicant has had previous experience with outreach initiatives
8. If voted onto the HRTC, applicant would fill identified gaps in representation of the current HRTC (think home city, age, work status, income, racial/ethnic identity, language, experience)
9. Evidence of interest and availability

8 Selected

3 Latinx

1. From Anaheim, Santa Ana, San Juan Capistrano
2. Two in the 35-44 age range, one in the 65-74 age range
3. Two work part-time, one is self-employed
4. One makes <\$20k, one makes \$20-35k, one makes \$35-50k
5. Preferred language for all three is Spanish
6. Two female, one male

2 API

1. From Santa Ana and Garden Grove
2. One in the 35-44 age range, one in the 45-54 age range
3. One doesn't work, one is self-employed
4. One makes <\$20k, the other has no income
5. Preferred language for one is Khmer, for the other is English
6. One female, one male


8 Selected

2 Black

1. Both from Anaheim
2. One in the 25-34 age range, one in the 45-54 age range
3. One works part-time, one is self-employed
4. Both make \$20-35k
5. Preferred language for both is English
6. Two female

1 MENA

1. No permanent home; currently residing in Fountain Valley
2. In the 18-24 age range
3. Does not work
4. No income
5. Preferred language is English
6. Female

An aerial photograph of a city at dusk, featuring a prominent blue rectangular frame with a white center. Two vertical red bars are positioned on the left and right sides of the white center. The text "CERF Implementation Update" is centered within the white area. The background shows city lights, roads, and distant mountains under a twilight sky.

CERF Implementation Update

Regional Plan: Part 2, Strategic Investments and Projects

- Fiscal Agents (on behalf of the HRTCs) would be eligible to apply for up to \$26.5M in funds from the Catalyst Program.
- A closed solicitation will open on September 1, 2023, and close on November 30, 2023.
- The remaining funding within CERF (approximately \$100M) will be made available after July 1, 2024, through a solicitation adapted from the Economic Development Pilot Program.

Regional Plan: Part 2, Strategic Investments and Projects

1. \$1.5M per region into the already identified Regional Convenor(s) to operate the established HRTC through at least September 30, 2026. The Convenor(s) would have the following deliverables:
 - Provide support to the HRTC in establishing up to three Industry Collaboratives and ensure coordination between the HRTC and Industry Collaboratives;
 - Collaborate with the GO-Biz and the U.S. EDA to develop Economic Development Districts where they do not currently exist;
 - Coordinate Implementation Phase applicants on behalf of the HRTC;
 - Support the HRTC on the use of the proposed anchor institution funding;
 - Support the Industry Collaboratives in identifying projects and label them as “exploratory” (agreed upon ideas that are at the very initial phases) and “last-mile” (agreed upon projects that need the final piece of the puzzle to begin development). After cataloging projects, the Convenor will present the identified projects to the HRTC for final approval;
 - Track the projects identified by the Industry Collaboratives and the HRTC including applications and awards for additional funding from other funding sources.
2. \$25M per region into the development and implementation of Industry Collaboratives.

Industry Collaboratives

- Establishing up to three, specific to the industries identified and prioritized during the CERF Planning Phase.
- Mirror the HRTC's inclusive and equitable decision-making structure and should include representation from the identified categories in the Planning Phase SFP

Responsible For:

- Designating an Industry Careers Coordinator who would be responsible for the following activities (no more than \$3M)
- Engaging with local public agencies to identify specific parcels that could be developed by, or for, the identified industries (no more than \$1M)
- Developing a revolving loan fund specific to supporting businesses within the identified industries (no more than \$5M)
- Identifying anchor institutions that may be at risk of financial insolvency or relocation outside of California, and if closed, would create a negative impact on the community. The HRTC would then be responsible for making any final determinations for funding (no more than \$1M). Funded institutions would develop a plan for transition to a worker-owned co-operative model or a community-managed asset structure.

Responsible For:

- Invest pre-development dollars into projects labeled as “exploratory” and “last mile” and be prioritized in communities identified as disinvested (as defined in the Planning Phase SFP). The Industry Collaboratives must receive final approval from the HRTC before expensing funds (no more than \$15M).
- Pre-development activities include, but are not limited to:
 - Feasibility studies; market analysis; environmental assessments, surveys, and remediation; site acquisition; site and development plans; project designs; permitting; establishing a regional tax increment financing district; drafting and negotiating Community Benefits and Community Workforce Agreements; financial planning (e.g., preliminary budget and construction financing)
 - Basic environmental infrastructure pre-development, construction, and development of long-term operations and maintenance plans for infrastructure such as: clean water supply systems; wastewater systems; waste disposal systems; pollution control services
 - Support costs for building and sustaining the capacity of project leads and partners, such as: investments in partner and local staff development; funding new and/or critical positions; acquiring or utilizing tools and resources to increase partner capacity for project planning and implementation; organizational capacity activities such as access to financial services or legal review; developing new pilot or demonstration projects and programs; participation and/or partnership with existing workforce programs; providing or securing technical assistance for partners.

Map Link:

<https://storymaps.arcgis.com/stories/4e43b627492d4841918330a89780a3ae>

Title:

Unequal Pollution: Unraveling the Connections Between Environmental Justice and Public Health

Summary:

A comprehensive and detailed exploration of how environmental justice and public health are inextricably linked in Orange County, shedding light on the complexities while emphasizing the need for proactive measures to promote a healthy and equitable environment for all residents.

Extended Explanation:

By examining the connections between environmental justice and public health in Orange County, California, this StoryMap provides a comprehensive view of environmental justice issues related to pollution and health, focusing on climate change indicators and health outcomes at the local level. The maps explore topics such as heat vulnerability, air quality indicators like tree canopy, impervious surfaces, and particulate matter pollution. Communities with higher concentrations of low-income families and people of color face greater exposure to environmental hazards, leading to increased risks of chronic diseases and premature death. The economic implications and projected changes in development emphasize the importance of prioritizing sustainability and equity for the well-being of all communities.

Three Points

1. Disproportionate exposure - the goal of environmental justice is to address the distribution of environmental hazards and benefits, but often disinvested communities face higher levels of pollutants and toxins. This results in higher risks of negative health outcomes like asthma, cancer, and babies being born with low birth weights.
2. Access to resources - access to clean air and safe drinking water are essential services and limited access can exacerbate health disparities.
3. Community empowerment and engagement - both environmental justice and public health have an emphasis on involving the community in the decision making process. This will foster a collaborative approach to a sustainable and just future.

Presentation to CERF HRTC on Two Topics:

1. Climate and Environmental Impact Analysis
2. Public Health Analysis

Marlon G. Boarnet

Professor of Urban Planning

Director of METRANS Transportation Consortium

University of Southern California

May 26, 2023

Overview and Approach

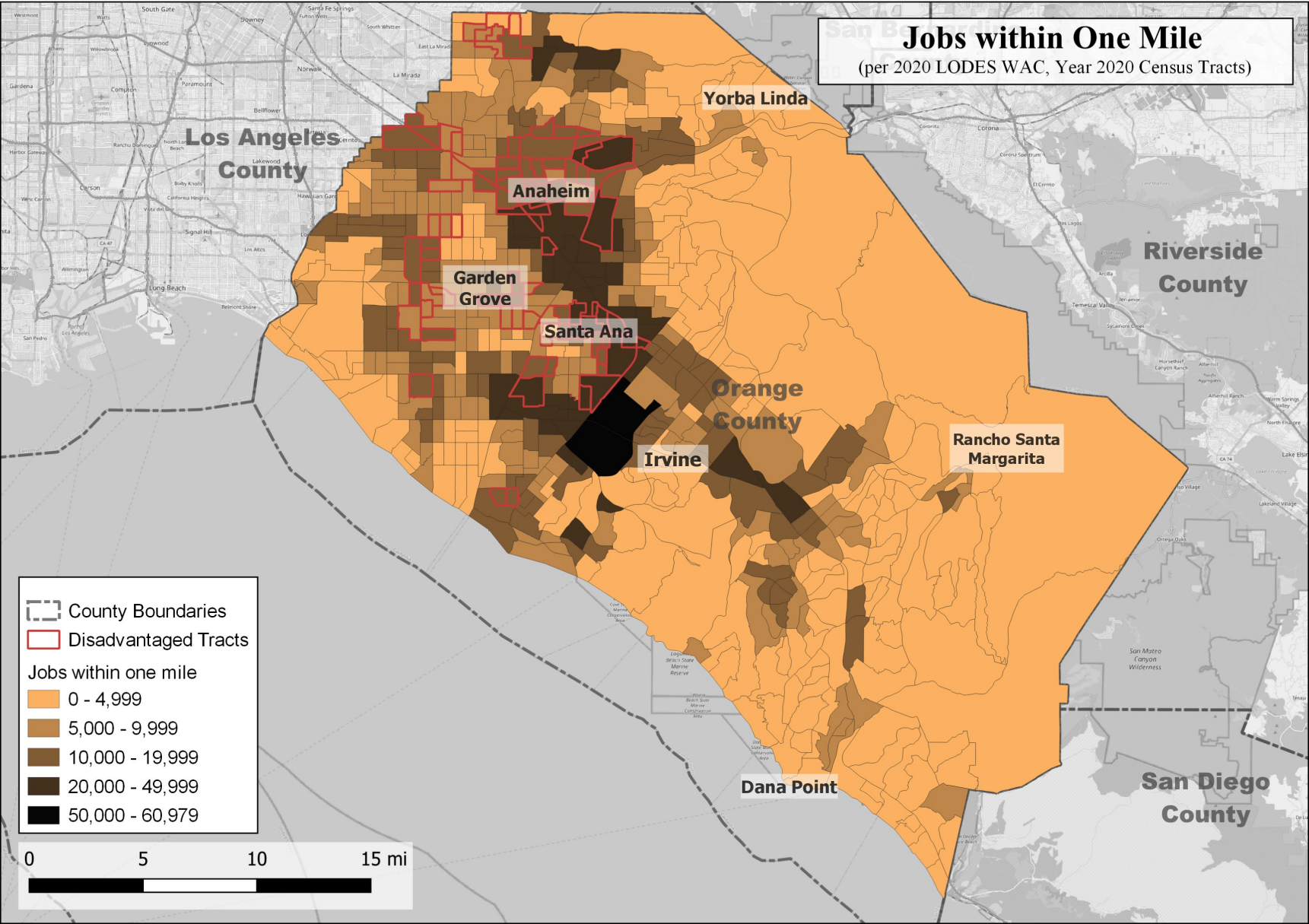
- Objective: Background data on Orange County
- Two parts:
 - Climate and Environmental Impact Analysis
 - Public Health Analysis
- For each part:
 - Access to resources
 - Vulnerabilities
- Format
 - Maps of data, by census tracts
 - Descriptive data by quintiles to help quantify disparities
 - Differences between Disadvantaged Communities (SB 535) and tracts not among Disadvantaged Communities (will be called “disinvested and non-disinvested” tracts)

Climate and Environmental Impact Analysis

- Job Access
- Heat exposure
- Impervious Surface
- Tree Canopy

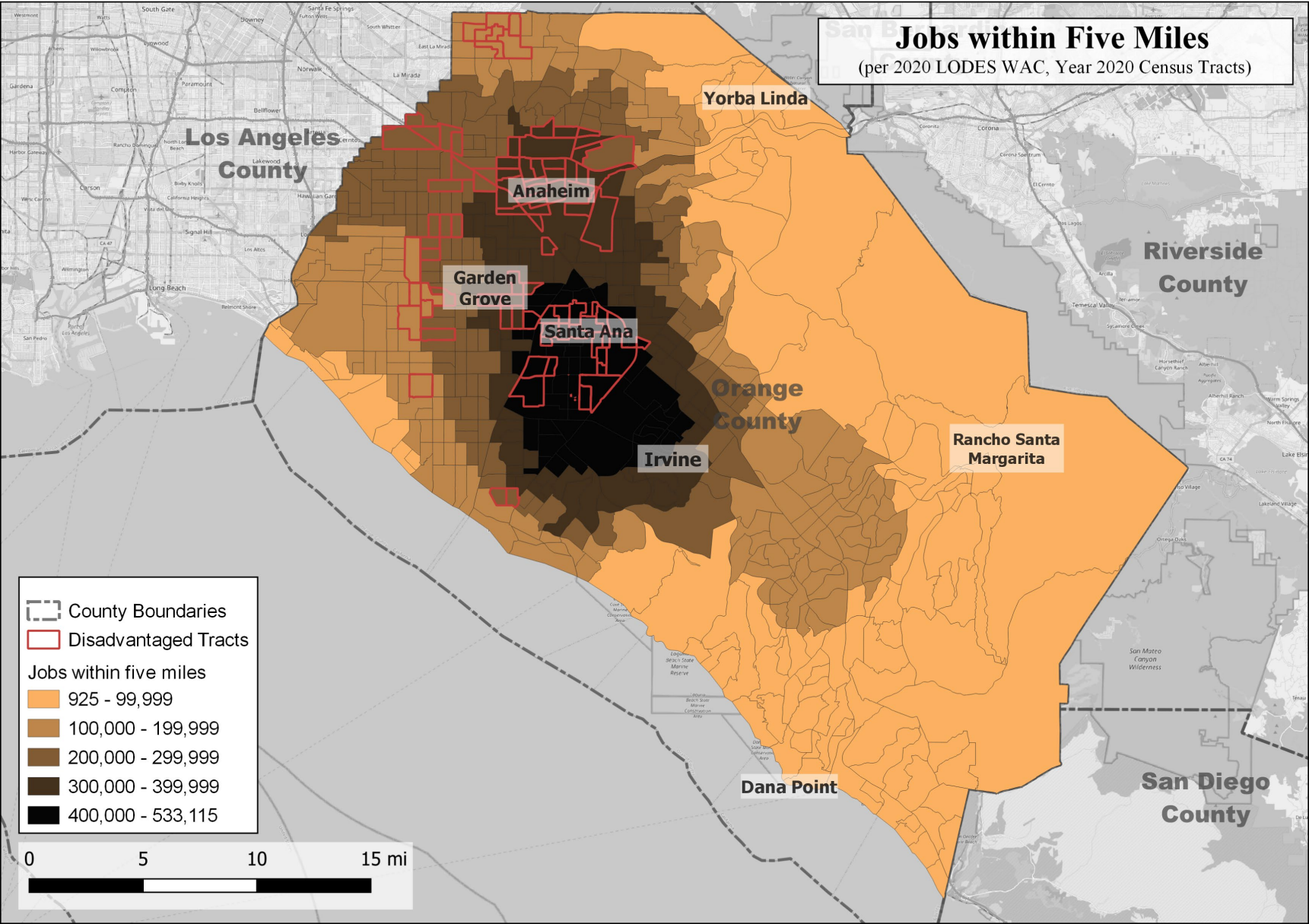
Jobs within One Mile of each Tract

Percentile	Jobs within ...		
	1 Mile	5 Miles	10 Miles
0	0	925	51,386
20th	2,891	114,498	506,775
40th	5,577	187,669	786,611
60th	8,416	265,239	928,647
80th	13,674	368,586	1,044,228
100th	60,979	533,115	1,210,052



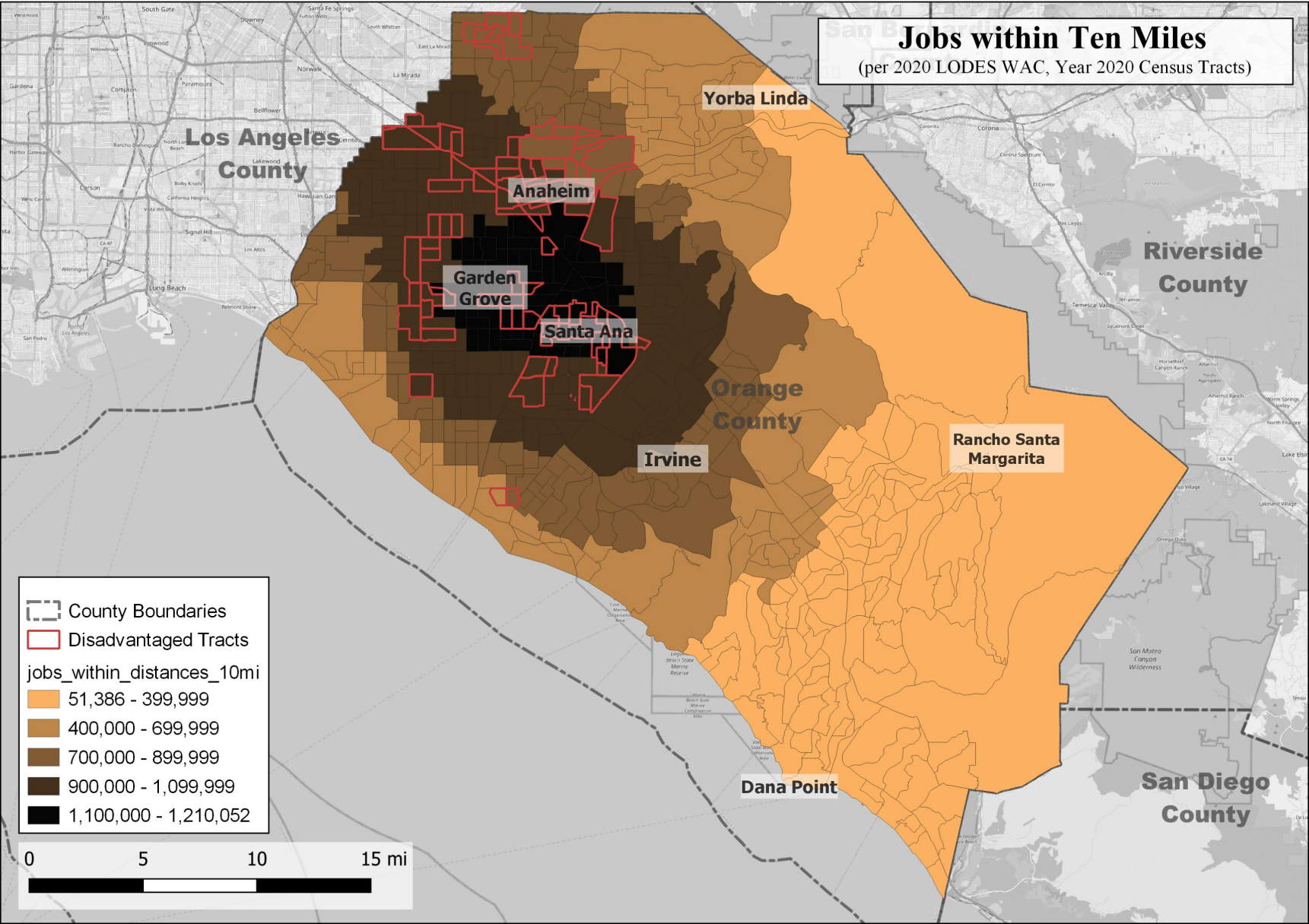
Jobs within Five Miles of each Tract

Percentile	Jobs within ...		
	1 Mile	5 Miles	10 Miles
0	0	925	51,386
20th	2,891	114,498	506,775
40th	5,577	187,669	786,611
60th	8,416	265,239	928,647
80th	13,674	368,586	1,044,228
100th	60,979	533,115	1,210,052

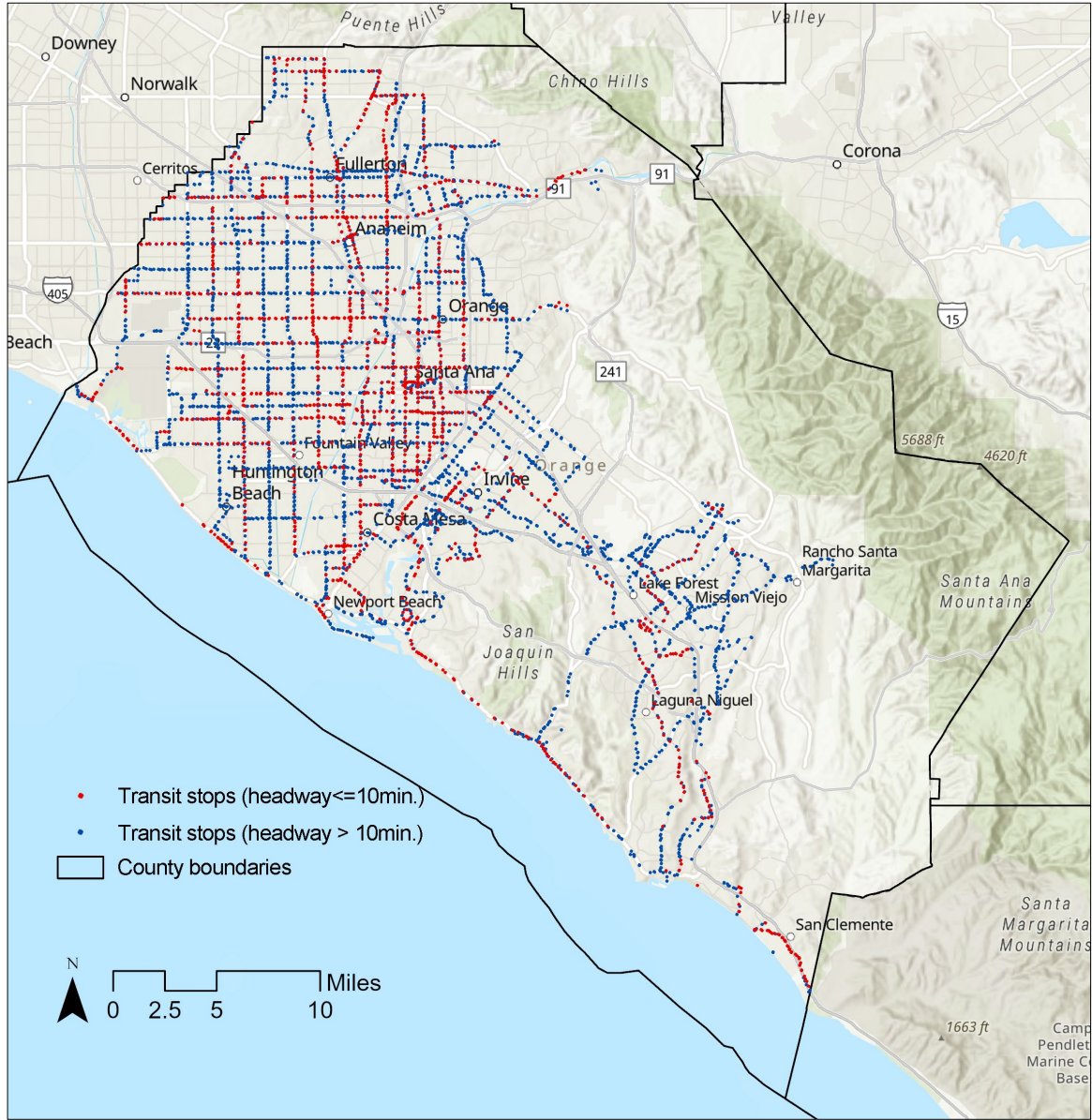
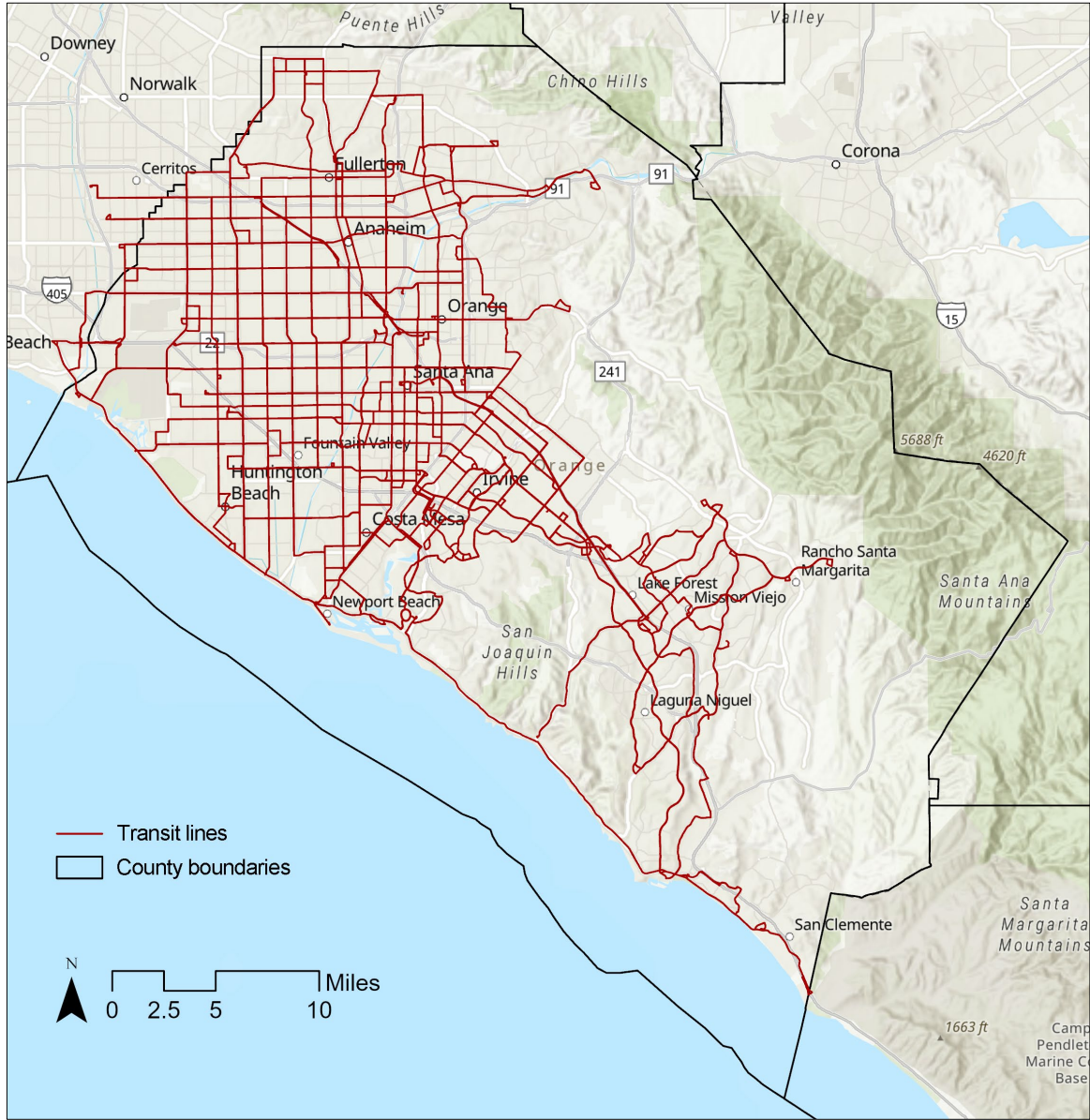


Jobs within Ten Miles of each Tract

Percentile	Jobs within ...		
	1 Mile	5 Miles	10 Miles
0	0	925	51,386
20th	2,891	114,498	506,775
40th	5,577	187,669	786,611
60th	8,416	265,239	928,647
80th	13,674	368,586	1,044,228
100th	60,979	533,115	1,210,052

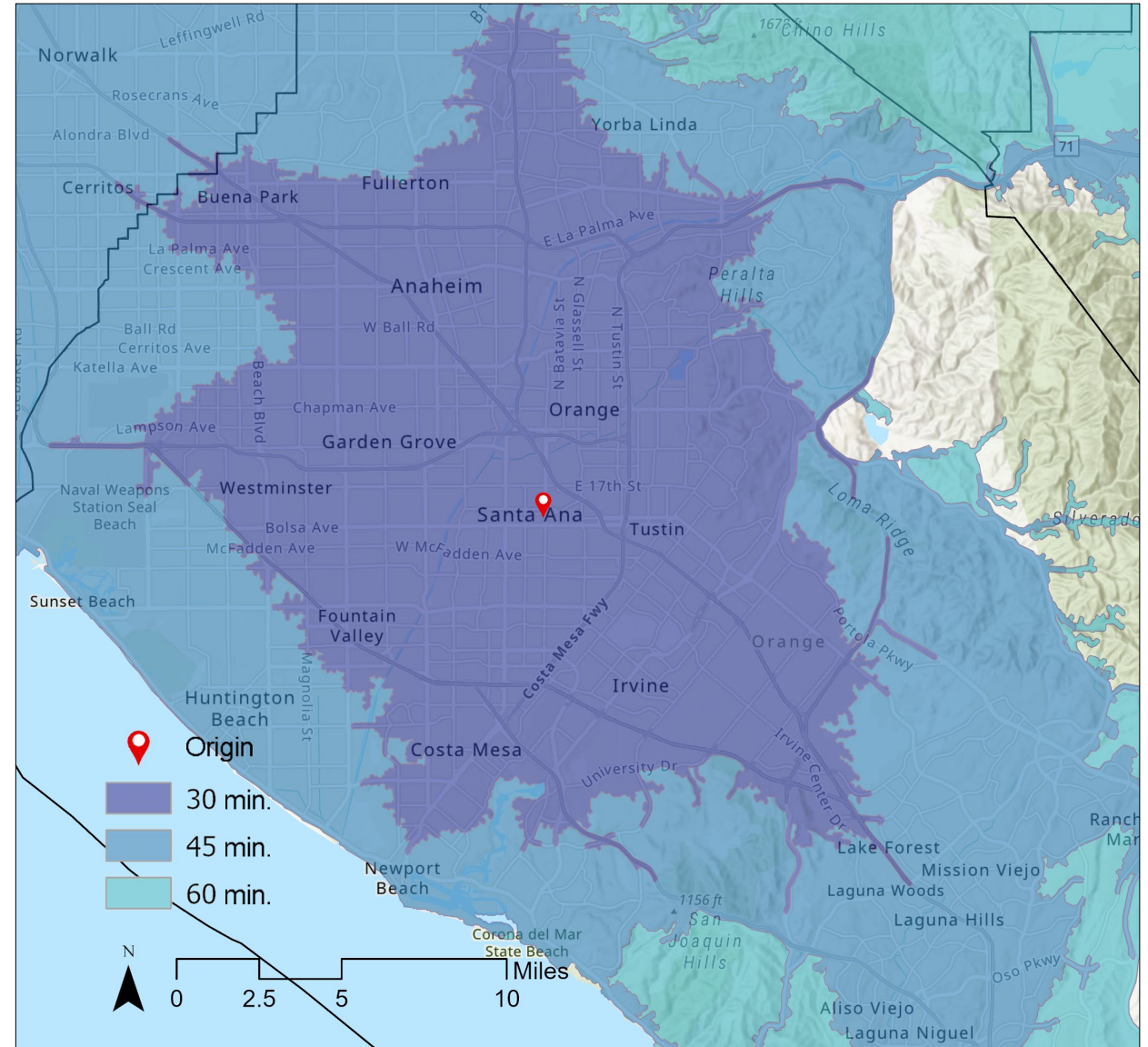


Location of transit lines and stops, red = < 10 minute headway, blue = > 10 minute headway (at 8 a.m. weekday), source: GTFS



Driving isochrones – Santa Ana (30, 45, 60 minutes)

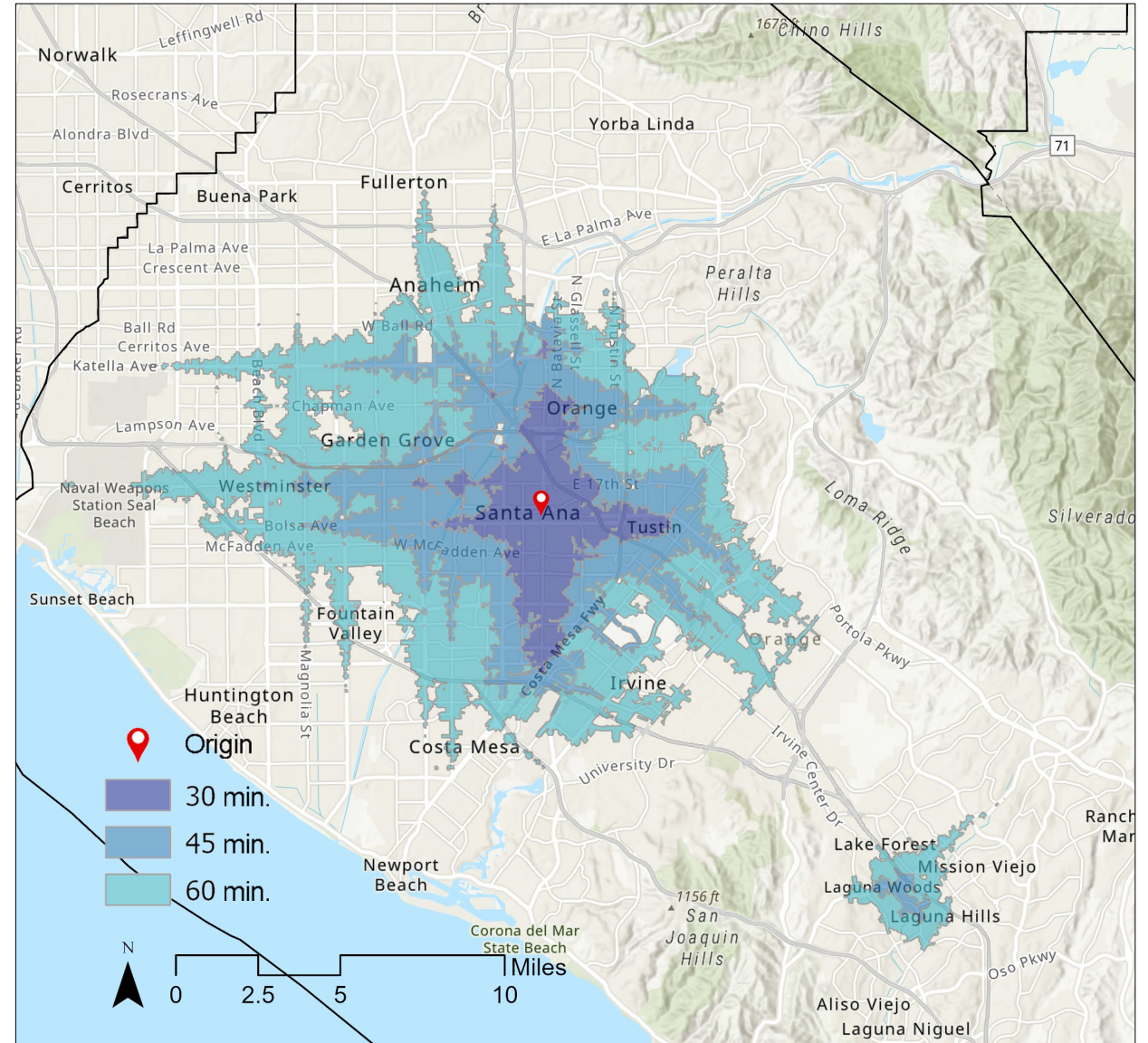
Origin location address:
117 W 4th St, Santa Ana, CA



Transit isochrones – Santa Ana (30, 45, 60 minutes)

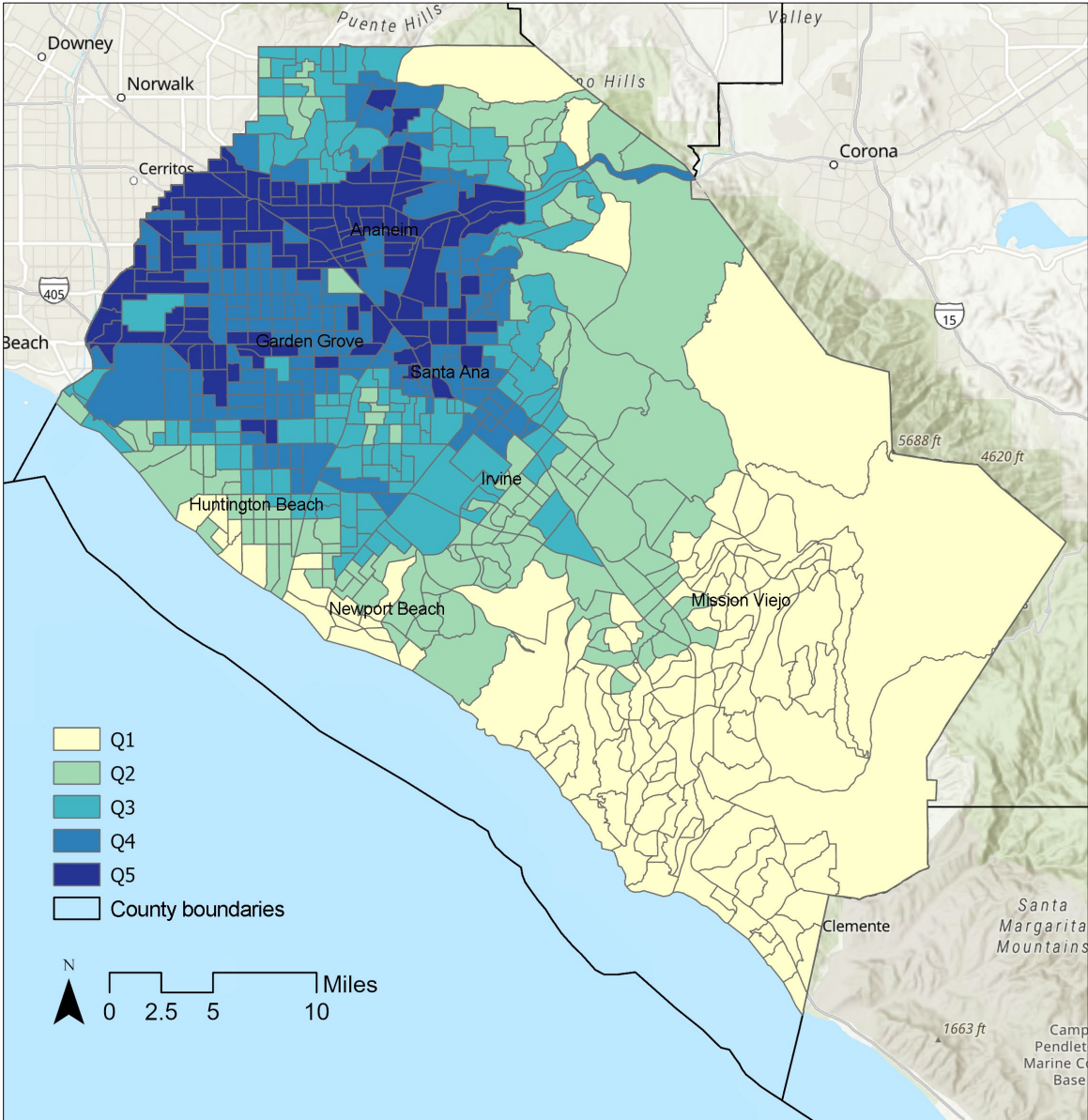
FLM speed = 3 miles per hour

Origin location address:
117 W 4th St, Santa Ana, CA



of jobs within 30 minutes by car

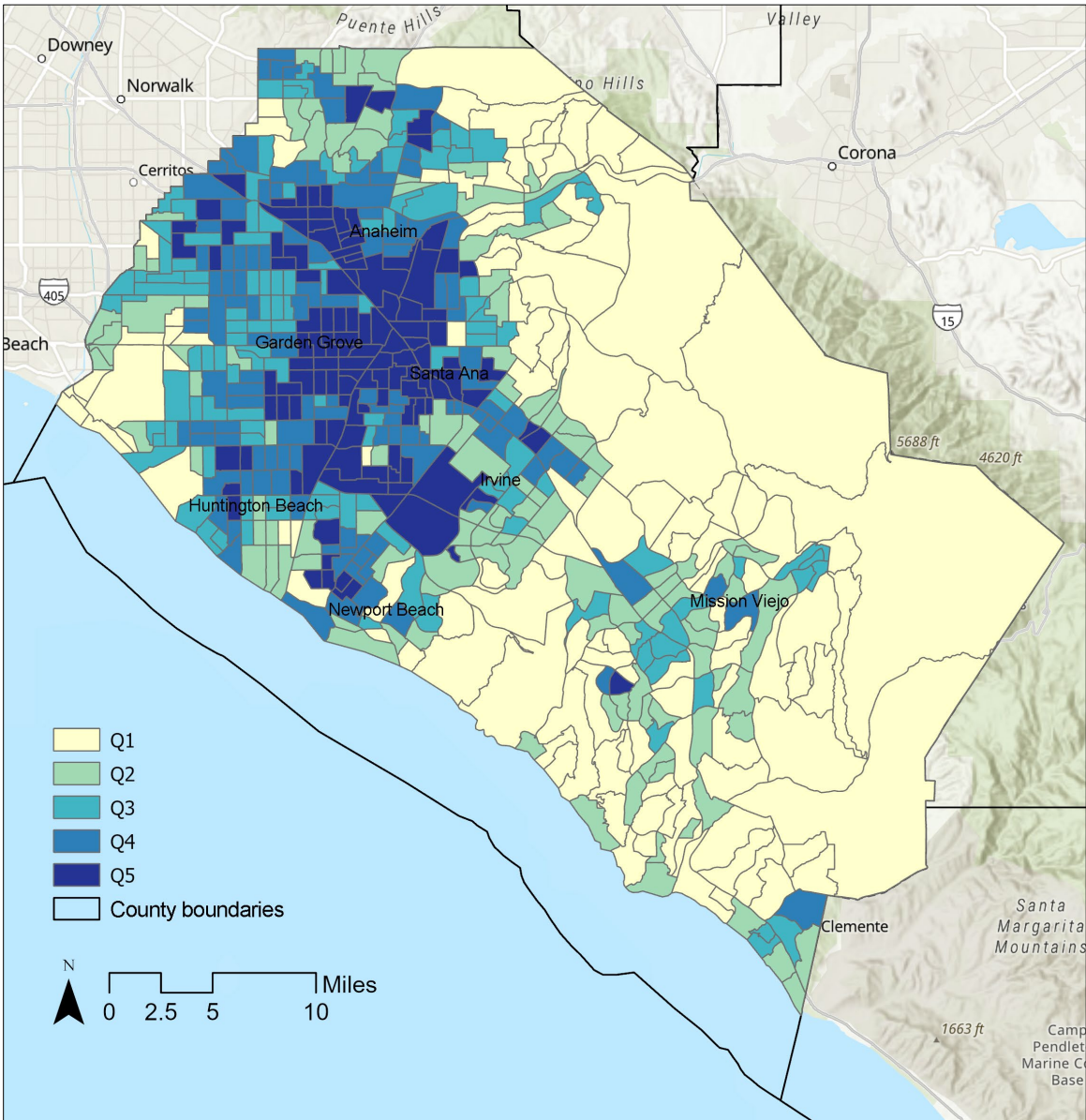
Quintile	Range
0-20%	0-88772
20-40%	88773-122525
40-60%	122526-138680
60-80%	138681-152359
80-100%	152360-183896



of jobs within 30 minutes by transit

FLM speed = 3 miles per hour

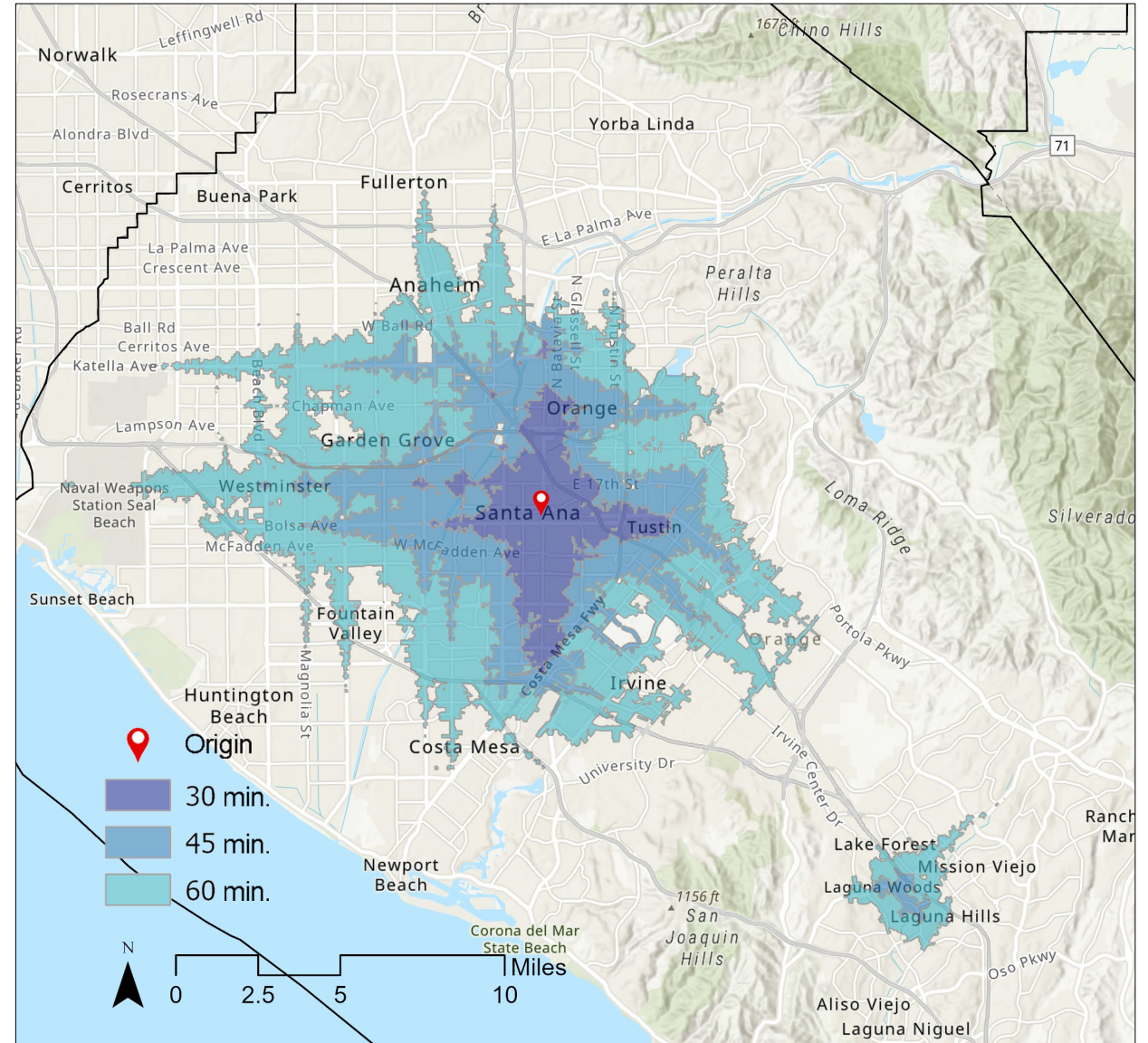
Quintile	Range
0-20%	0-321
20-40%	322-986
40-60%	987-2060
60-80%	2061-3452
80-100%	3453-18823



Transit isochrones – Santa Ana (30, 45, 60 minutes)

FLM speed = 3 miles per hour

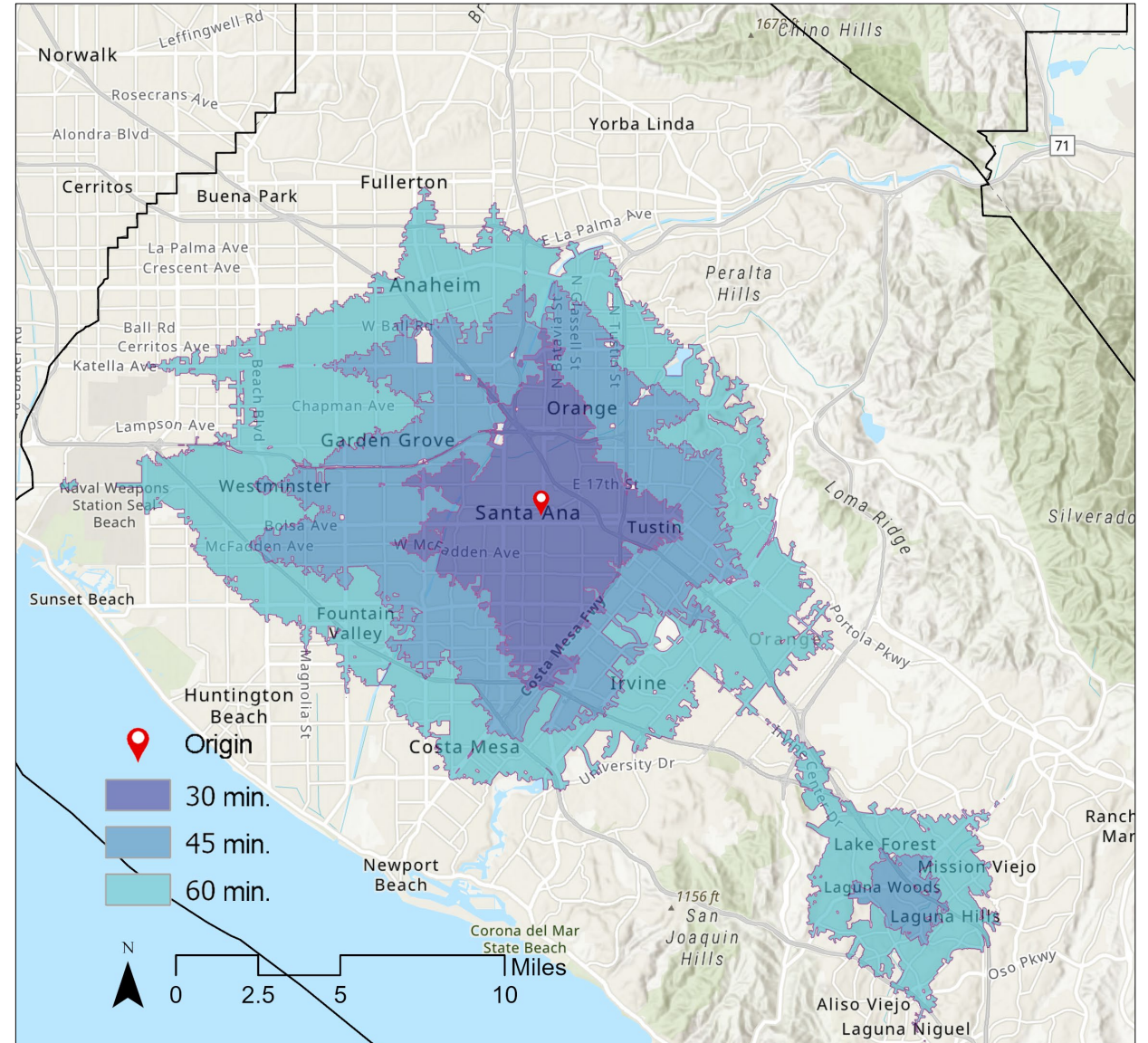
Origin location address:
117 W 4th St, Santa Ana, CA



Transit isochrones – Santa Ana (30, 45, 60 minutes)

FLM speed = 10 miles per hour

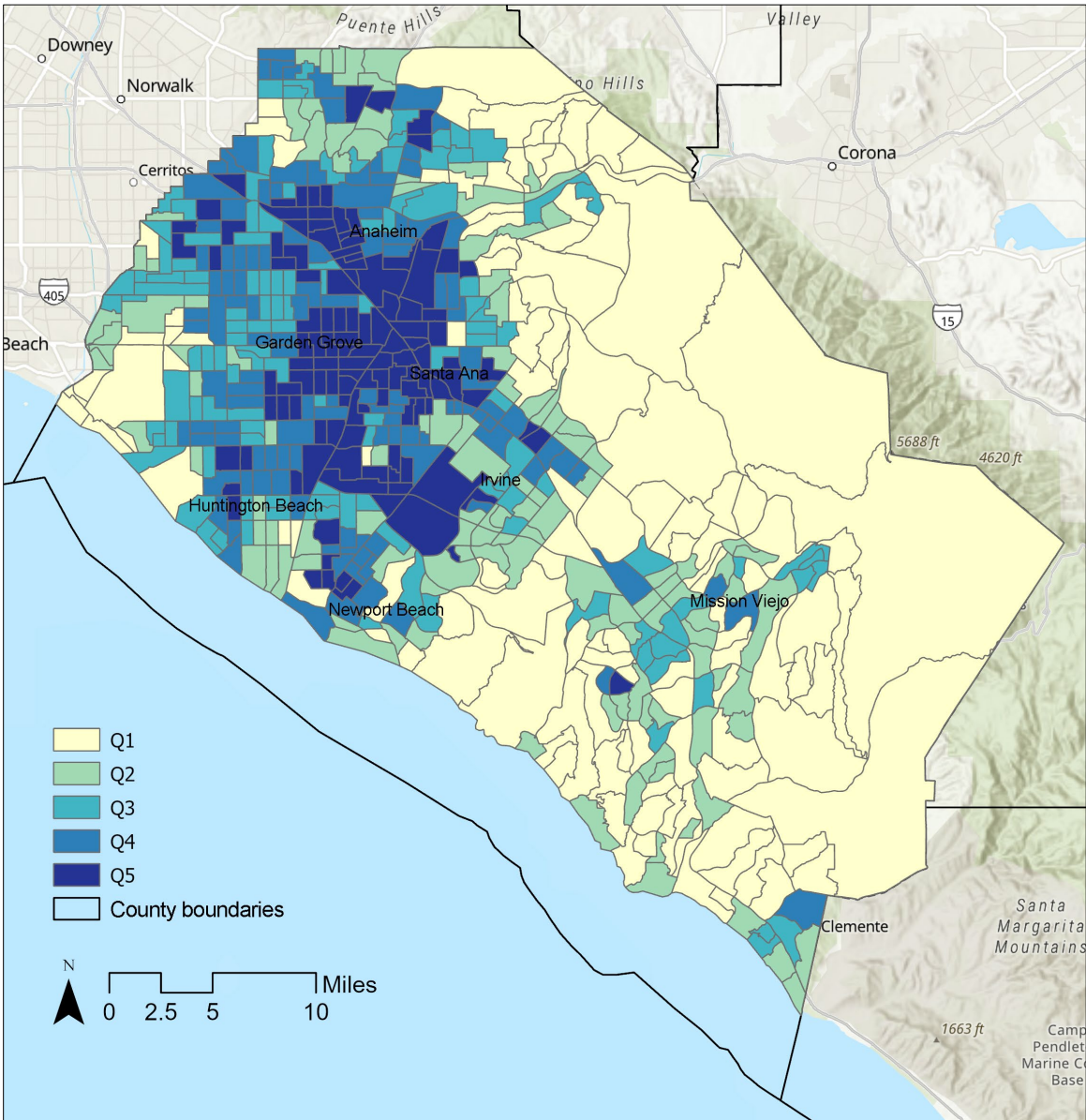
Origin location address:
117 W 4th St, Santa Ana, CA



of jobs within 30 minutes by transit

FLM speed = 3 miles per hour

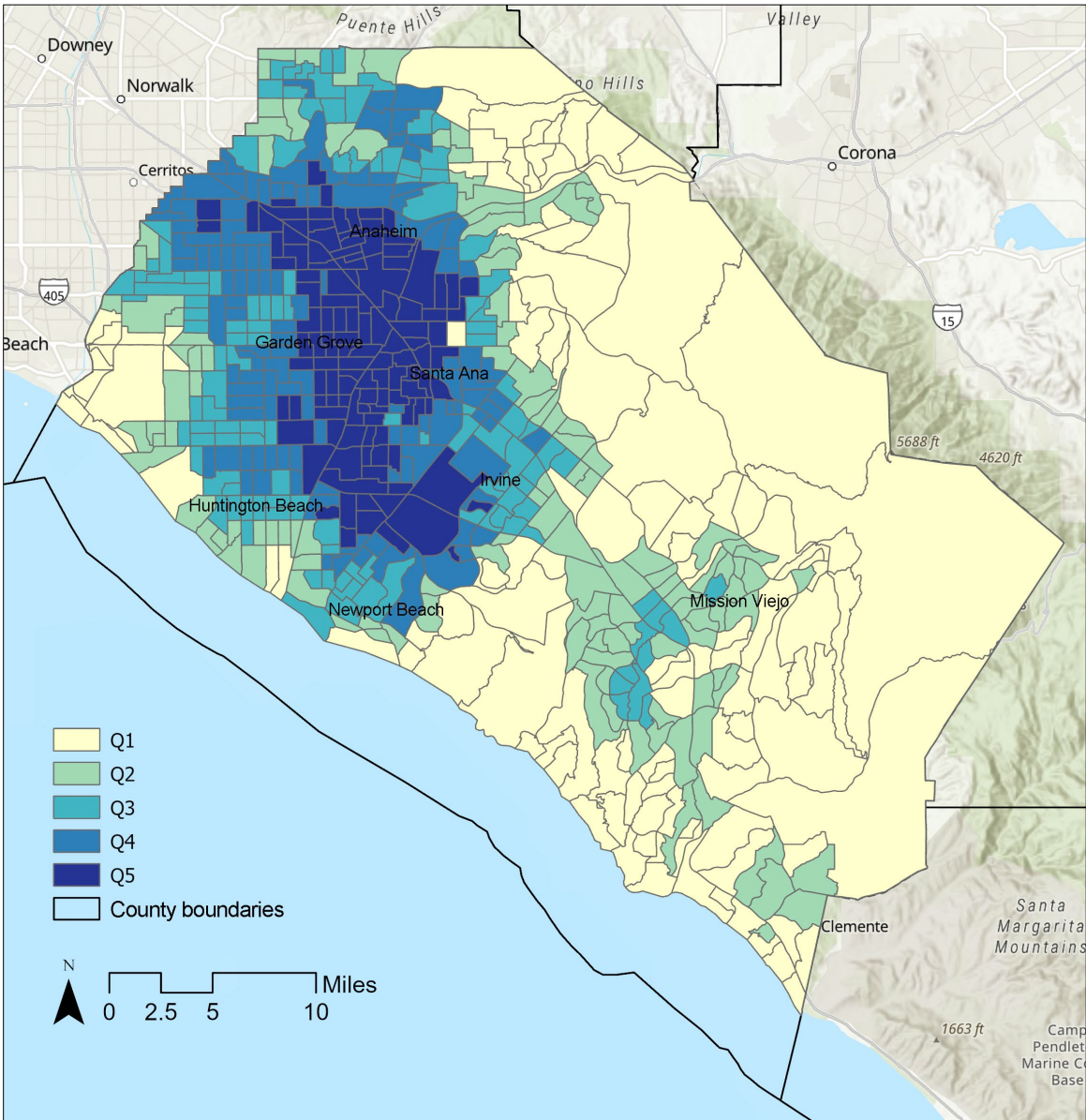
Quintile	Range
0-20%	0-321
20-40%	322-986
40-60%	987-2060
60-80%	2061-3452
80-100%	3453-18823



of jobs within 30 minutes by transit

FLM speed = 10 miles per hour

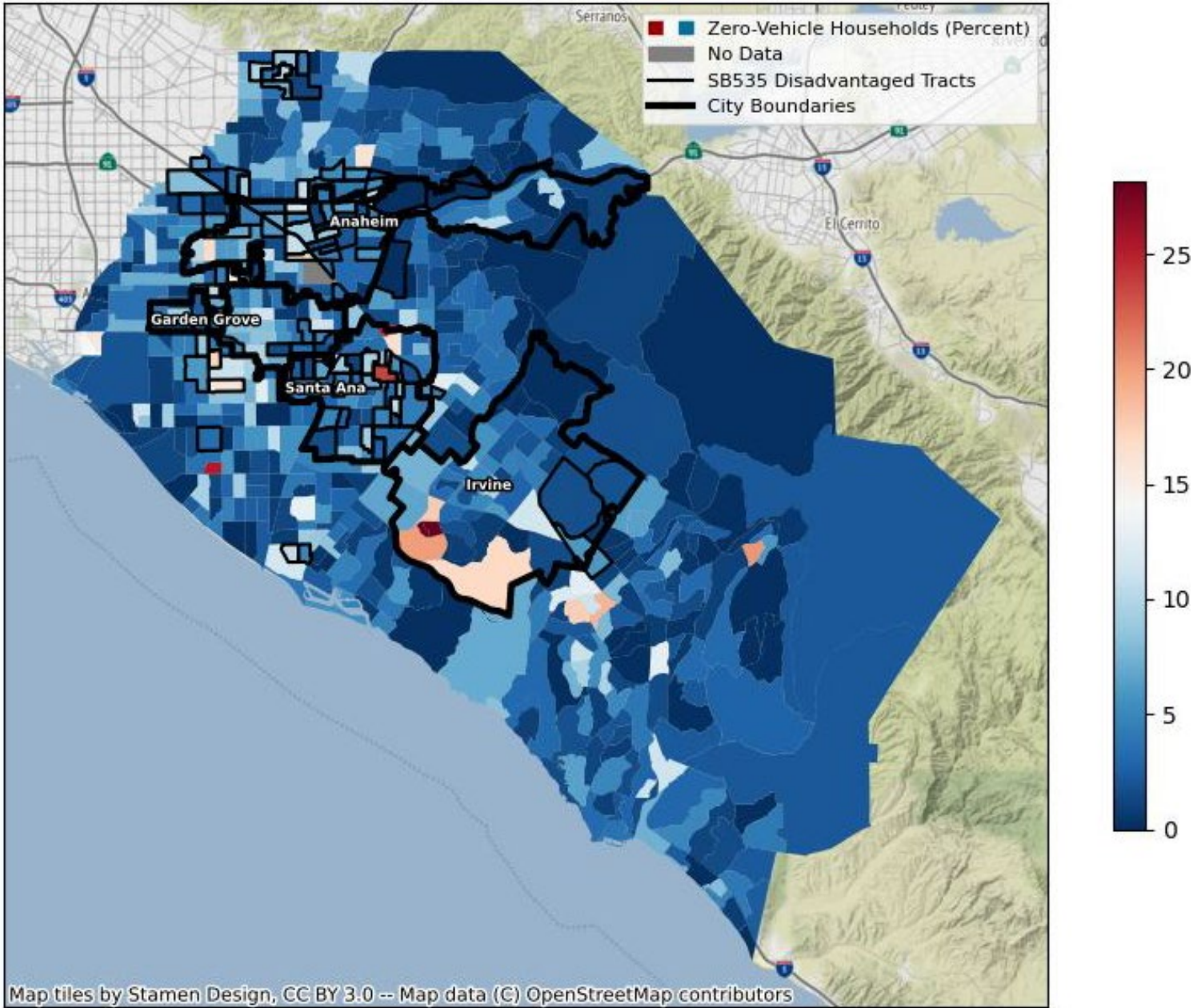
Quintile	Range
0-20%	0-2621
20-40%	2622-5697
40-60%	5698-8906
60-80%	8907-13894
80-100%	13895-41751



Percent of Zero-Vehicle Households

ACS 2017-2021 5-Year Estimates

Category	Mean	Range
Full County	4.38	0.0-28.2
Disinvested	5.89	0.0-23.61
Non-Disinvested	4.10	0.0-28.2
Quintile 1	0.44	0.0-1.1
Quintile 2	1.74	1.1-2.35
Quintile 3	3.27	2.35-4.15
Quintile 4	5.41	4.16-7.14
Quintile 5	11.03	7.15-28.2



Takeaways: Transportation and Job Access

- Both jobs and the transit network are more dense in central and north county
- From Santa Ana, a 45-minute 8 a.m. car commute will reach most areas of Orange County; a 45-minute transit commute will not reach Irvine Spectrum, Newport Beach, Huntington Beach, or Fullerton
- At 60% percentile of the census tract distribution, jobs accessible in a 30-minute morning peak (8 a.m.) commute are equal to:
 - 152,359 jobs by car
 - 3,452 jobs by transit (walk speed station access/egress)
 - 13,894 jobs by transit (bicycle speed station access/egress)

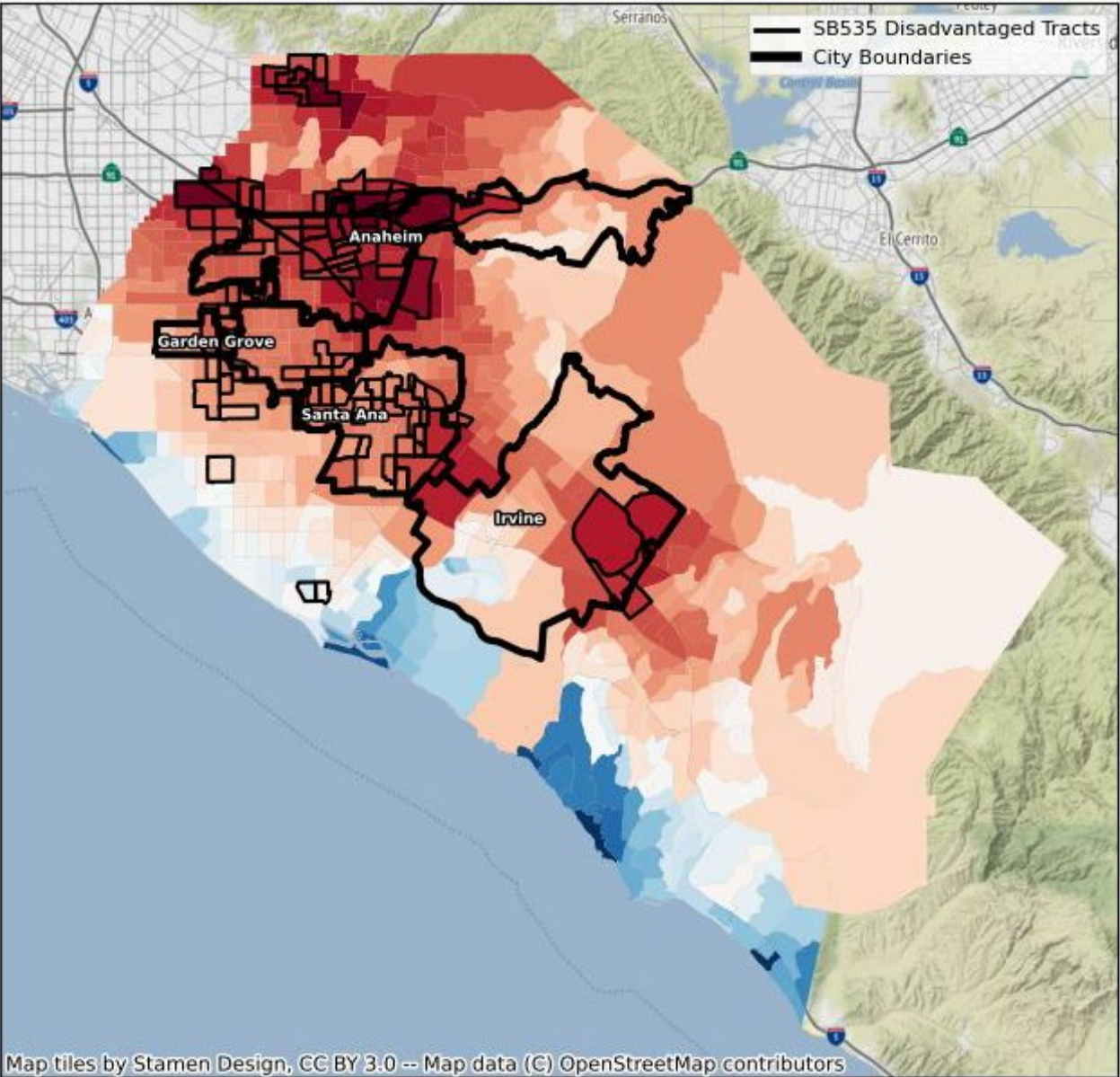
Climate Vulnerabilities

- Heat
- Impervious Surface
- Tree Canopy

Maximum Summer Surface Temperature (Jul-Aug 2002-2020), Degrees F

NASA Moderate Resolution Imaging Spectroradiometer (MODIS) Land Surface Temperature and Emissivity

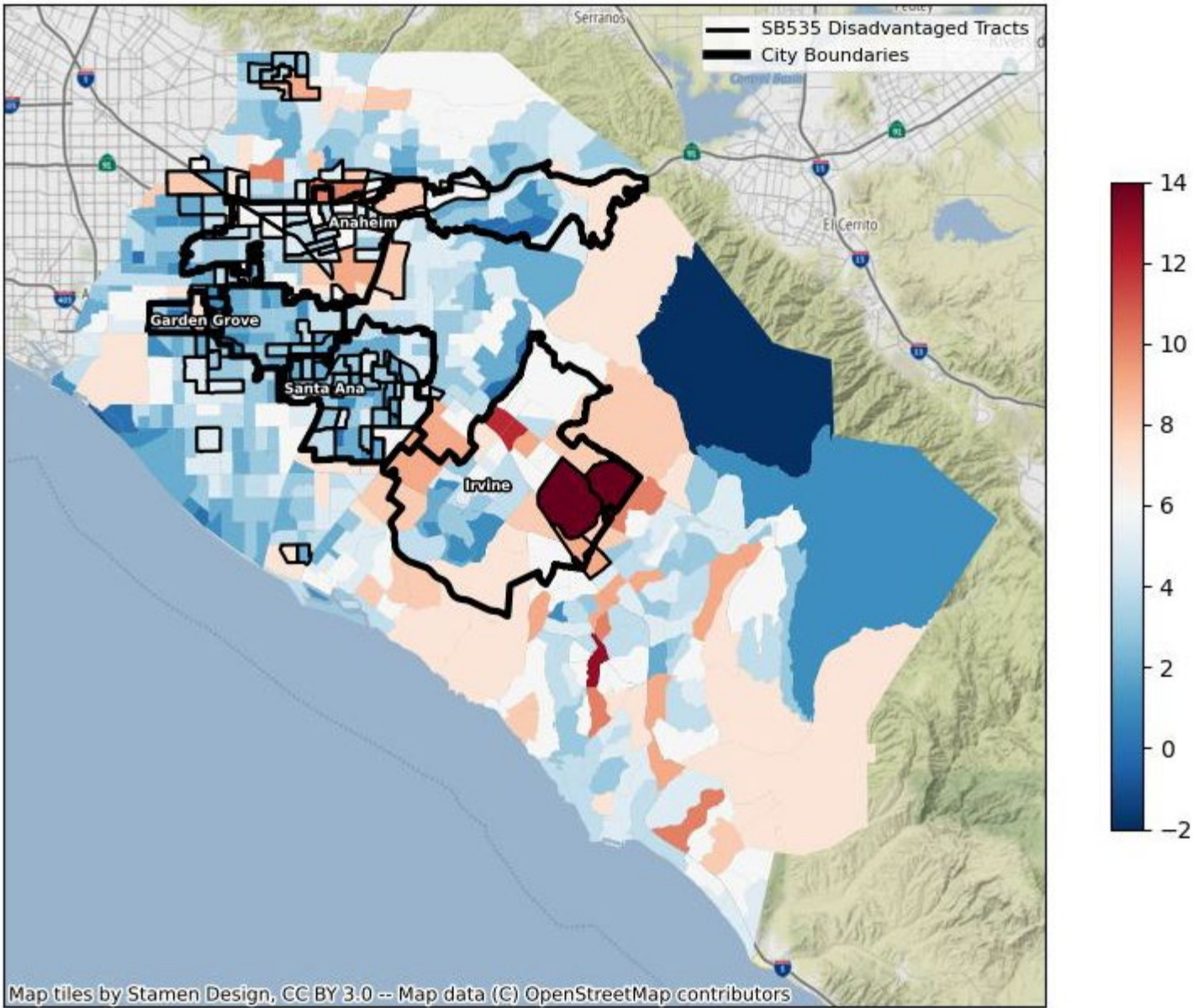
Category	Mean	Range
Full County	109.68	93.56-117.44
Disinvested	113.26	103.71-117.44
Non-Disinvested	109.01	93.56-117.1
Quintile 1	102.65	93.56-106.56
Quintile 2	108.16	106.59-109.52
Quintile 3	110.73	109.52-111.67
Quintile 4	112.38	111.69-113.06
Quintile 5	114.47	113.08-117.44



Maximum Heat Anomaly (2002-2020), Degrees F

NASA MODIS Land Surface Temperature and Emissivity

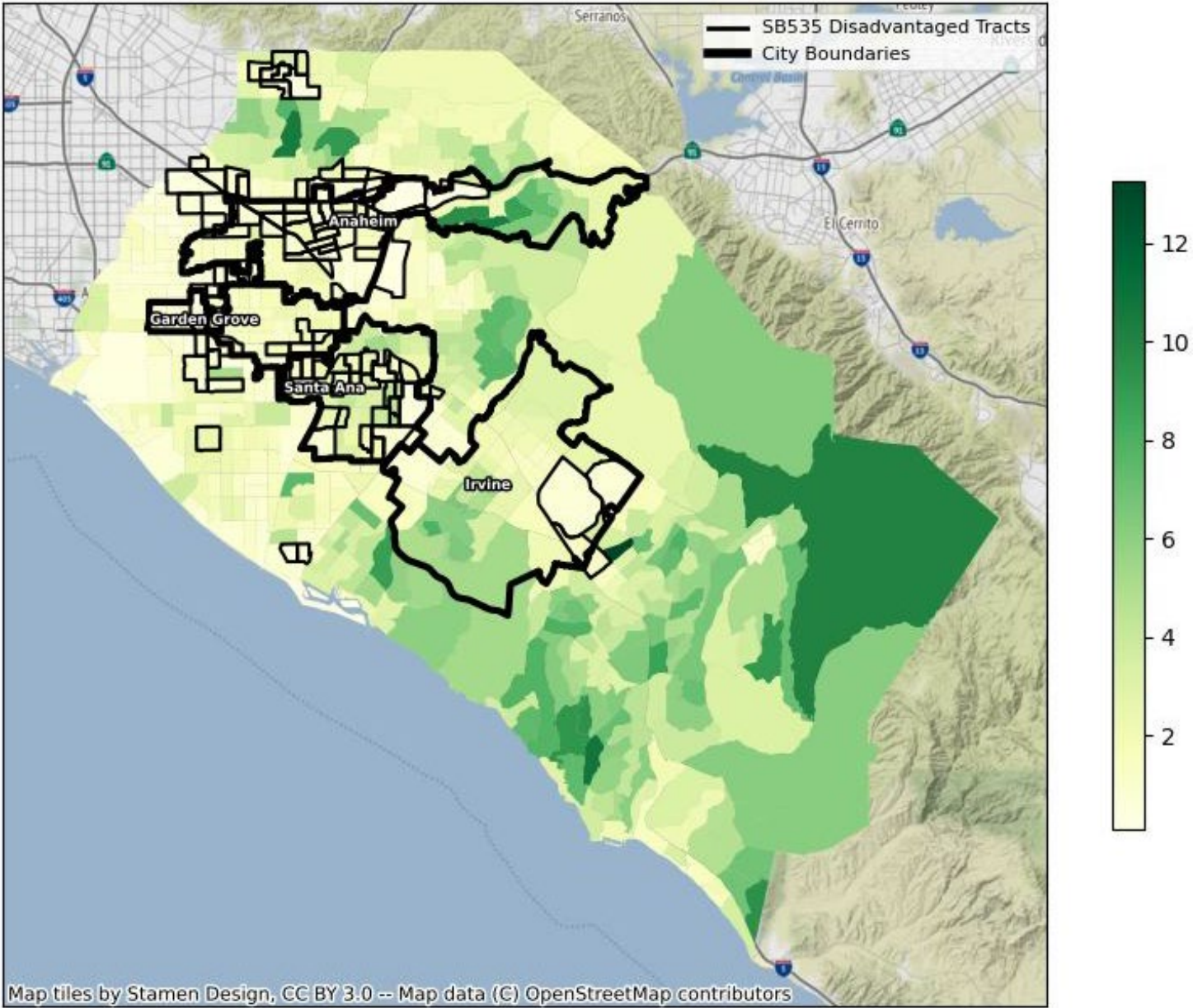
Category	Mean	Range
Full County	4.25	-2-14
Disinvested	4.48	1-14
Non-Disinvested	4.20	-2-13
Quintile 1	1.51	-2-2
Quintile 2	2.99	2-3
Quintile 3	3.99	3-5
Quintile 4	5.23	5-6
Quintile 5	7.51	6-14



Percent Tree Canopy Coverage

National Land Cover Database 2019

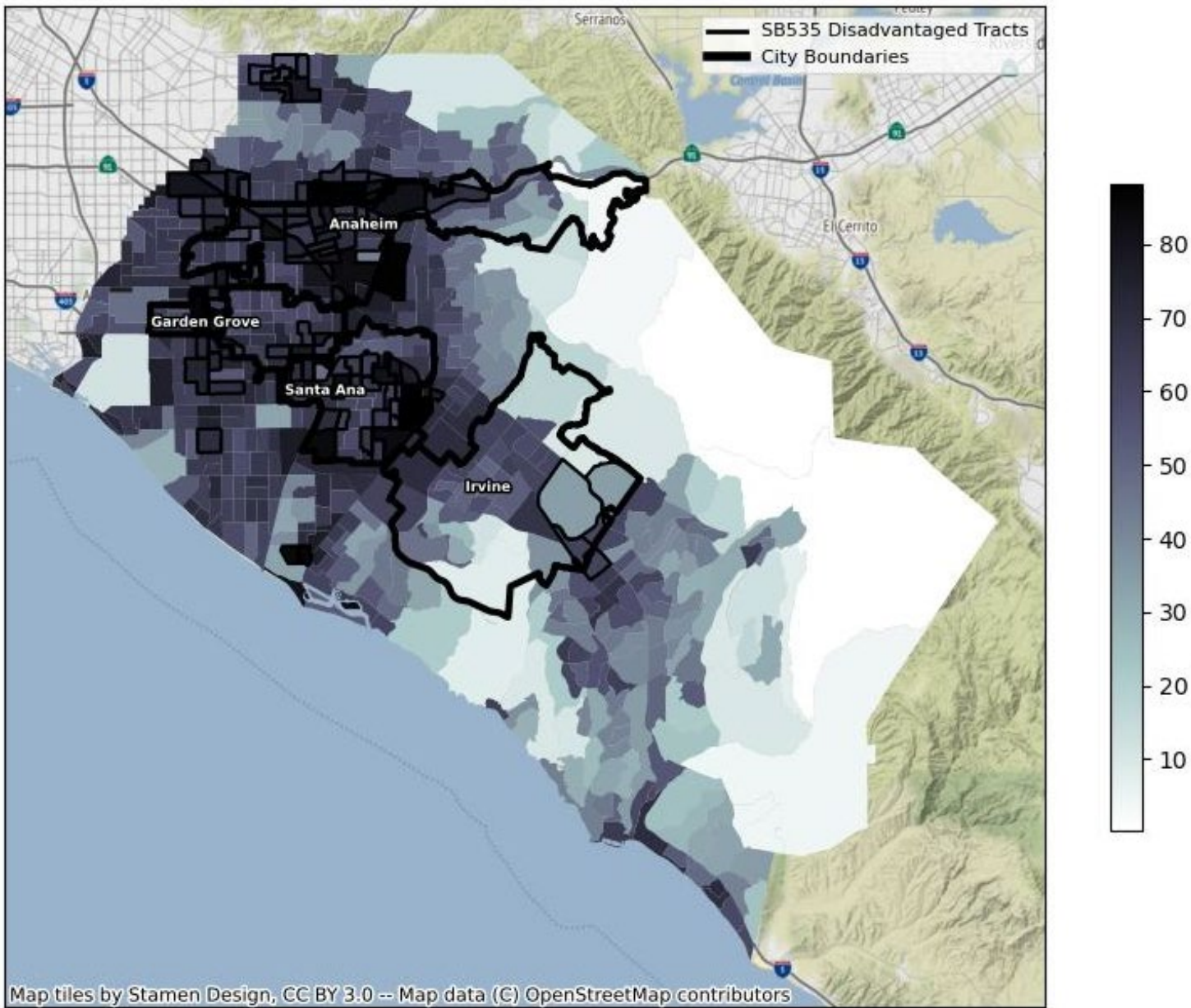
Category	Mean	Range
Full County	2.82	0.12-13.27
Disinvested	1.36	0.12-5.06
Non-Disinvested	3.10	0.15-13.27
Quintile 1	0.71	0.12-1.03
Quintile 2	1.34	1.03-1.66
Quintile 3	2.15	1.66-2.76
Quintile 4	3.51	2.78-4.48
Quintile 5	6.40	4.51-13.27



Percent Impervious Surface

National Land Cover Database 2019

Category	Mean	Range
Full County	56.18	0.4-88.29
Disinvested	69.61	34.34-88.29
Non-Disinvested	53.68	0.4-83.27
Quintile 1	28.20	0.4-43.07
Quintile 2	51.12	43.12-57.88
Quintile 3	61.06	57.89-63.42
Quintile 4	66.08	63.47-69.19
Quintile 5	74.46	69.26-88.29



Climate and Environmental Impact Analysis, Takeaways

- Central/North County are near jobs, but job access by transit is weaker (by 10% or less) than job access by car.
- Central/North County are concentrations of hotter temperatures (summer time highs can be 20 degrees F more inland than near coast), less tree canopy, and more impervious surface.
- The SB 535 disadvantaged (disinvested) communities are locations that are vulnerable to heat, heat islands, and in need of cooling centers and home cooling.

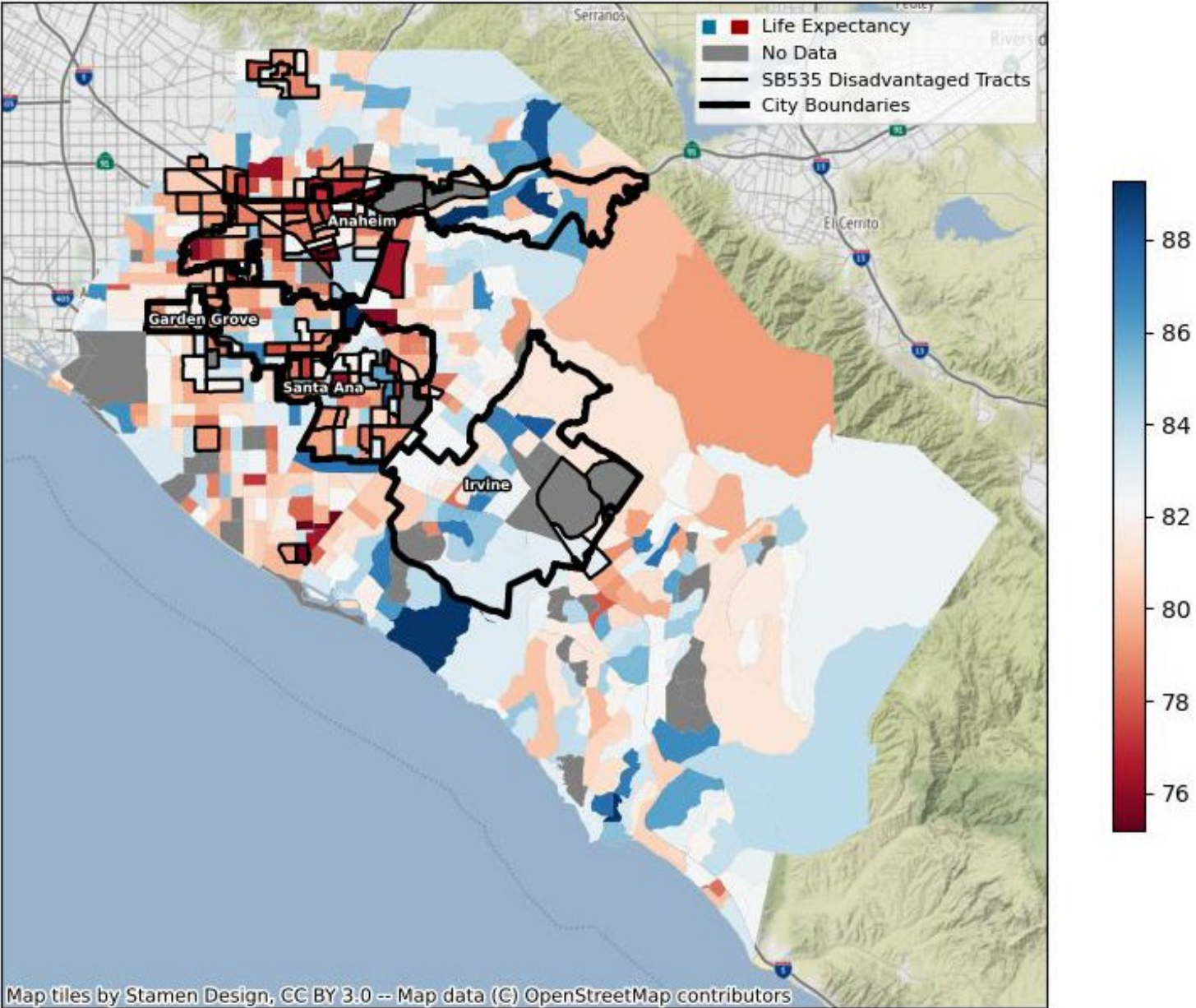
Public Health Analysis

- Vulnerabilities
 - Life expectancy at birth
 - Low Birth Weight
 - Asthma
 - Obesity
 - PM 2.5 concentrations
- Resources
 - Health care facilities
 - Health insurance

Life Expectancy in Years, at Birth

CDC Small-Area Life Expectancy Estimates Project (2010-2015)

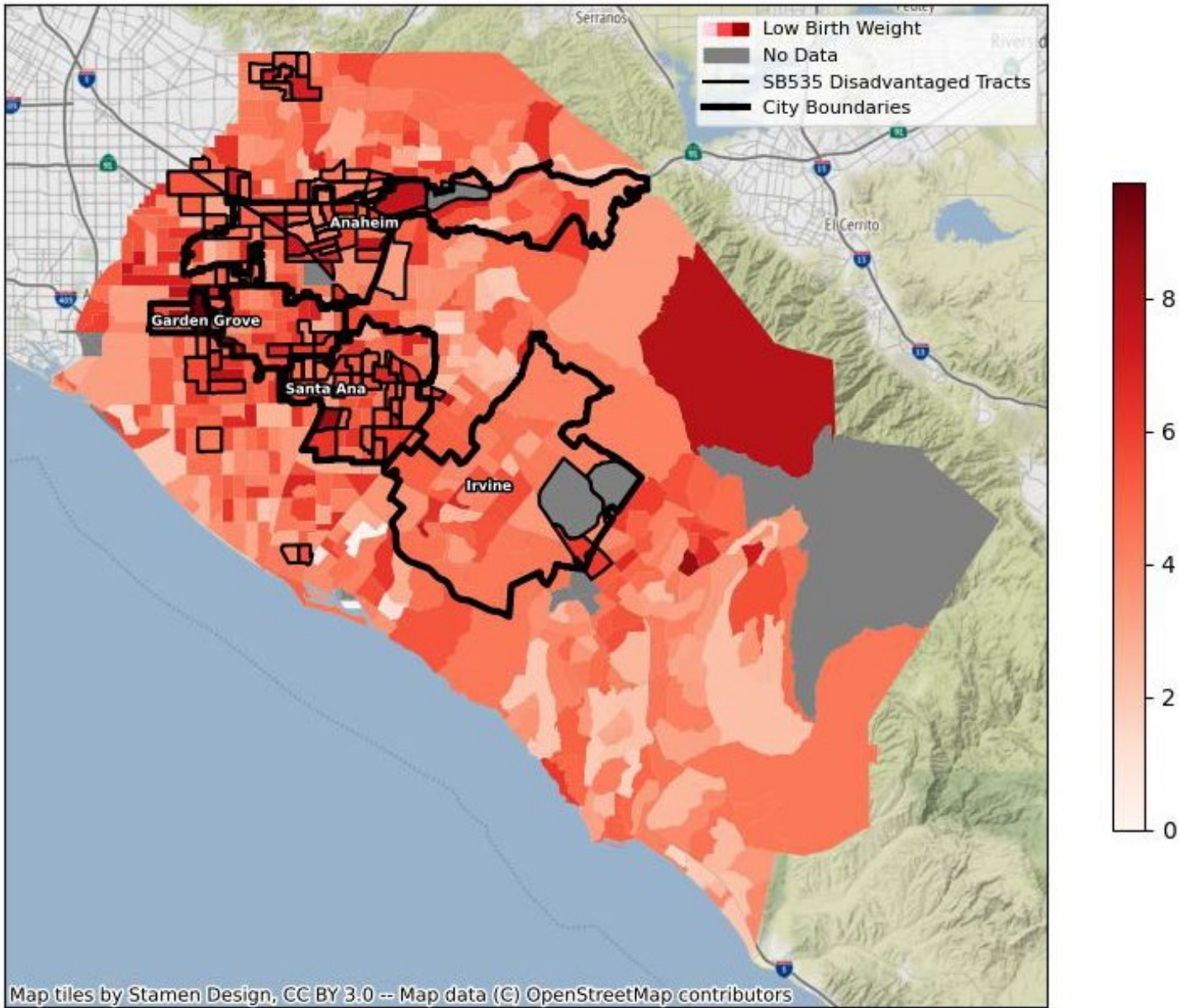
Category	Mean	Range
Full County	81.72	75.2-89.3
Disinvested	80.17	75.2-86.5
Non-Disinvested	82.00	75.2-89.3
Quintile 1	78.38	75.2-79.7
Quintile 2	80.43	79.7-81.1
Quintile 3	81.64	81.1-82.2
Quintile 4	82.83	82.2-83.6
Quintile 5	85.31	83.7-89.3



Percentage of Low Birth Weights

CalEnviroScreen (2009-2015)

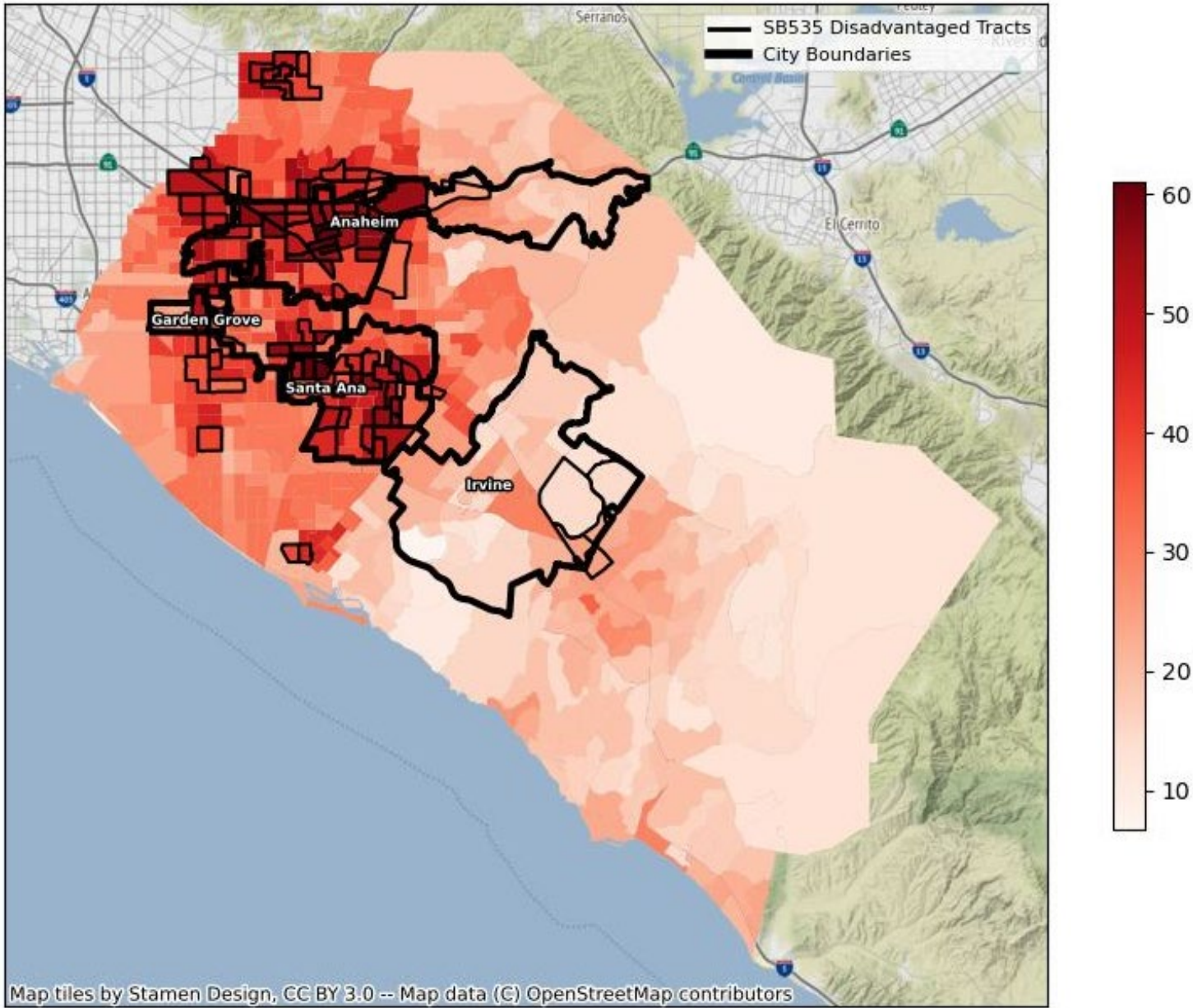
Category	Mean	Range
Full County	4.57	0.0-9.76
Disinvested	5.44	3.27-9.76
Non-Disinvested	4.41	0.0-8.75
Quintile 1	2.71	0.0-3.5
Quintile 2	3.92	3.5-4.2
Quintile 3	4.54	4.2-4.84
Quintile 4	5.22	4.84-5.58
Quintile 5	6.49	5.62-9.76



Asthma-Related Emergency Room Visits per 10,000 People

CalEnviroScreen (2015-2017)

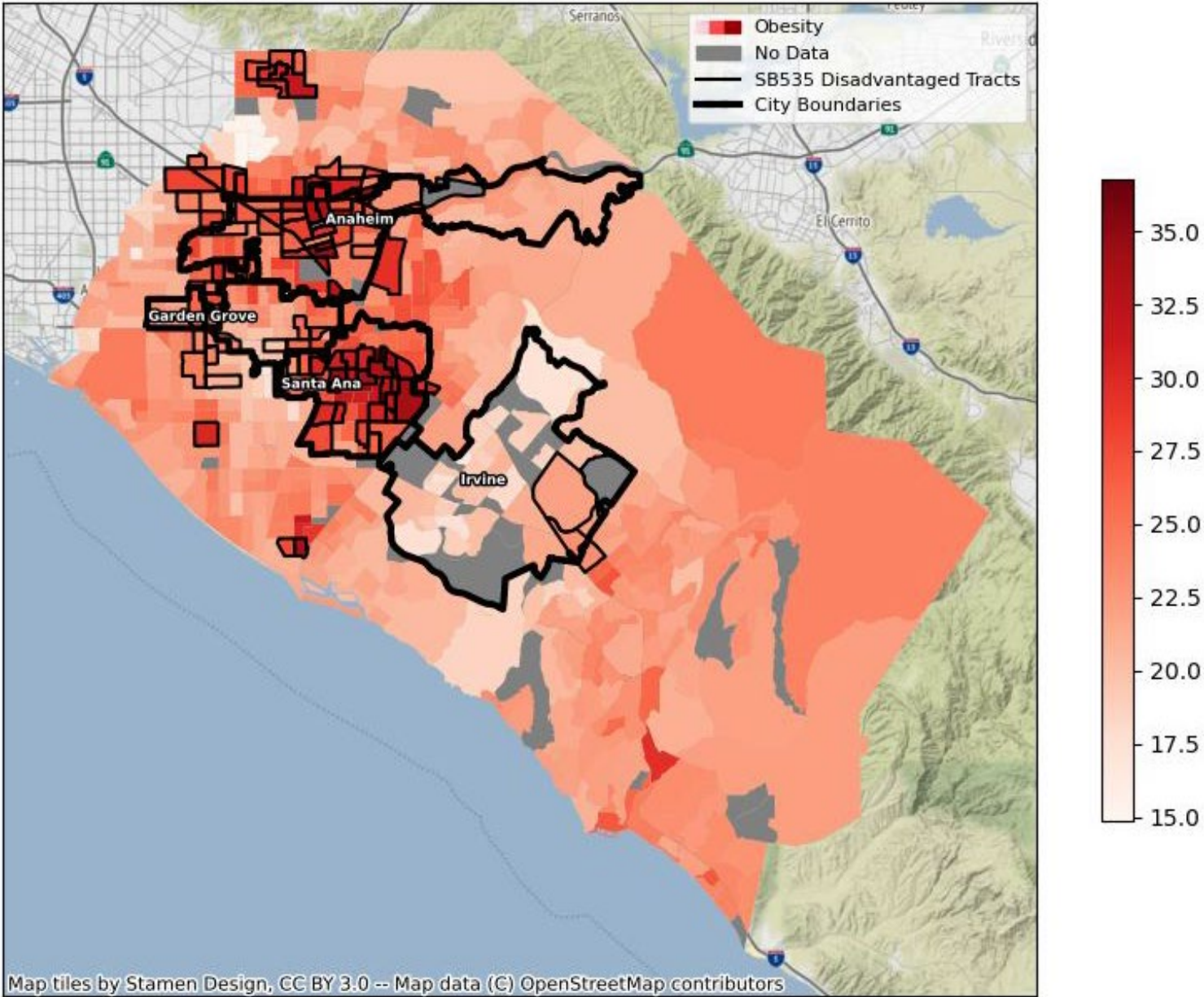
Category	Mean	Range
Full County	31.05	6.8-61.09
Disinvested	46.84	14.27-61.09
Non-Disinvested	28.11	6.8-56.42
Quintile 1	16.00	6.8-19.57
Quintile 2	22.73	19.66-25.83
Quintile 3	29.76	25.95-32.63
Quintile 4	36.90	32.65-41.25
Quintile 5	49.83	41.25-61.09



Obesity Percentage, adults age 20 and older, 2020

CDC Behavioral Risk Factor Surveillance System (BRFSS) PLACES Estimate

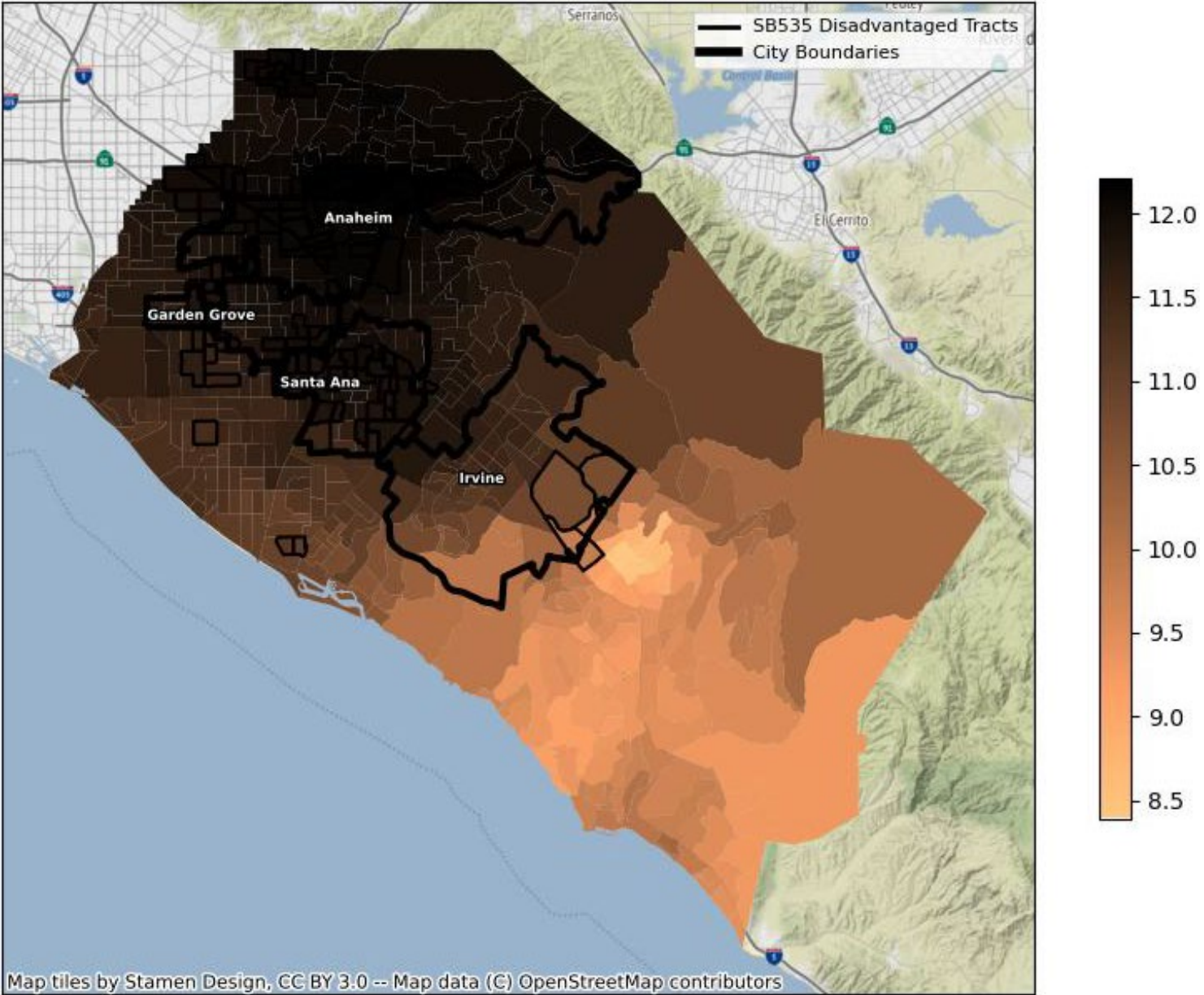
Category	Mean	Range
Full County	23.72	14.9-36.8
Disinvested	28.26	19.7-34.7
Non-Disinvested	22.84	14.9-36.8
Quintile 1	19.69	14.9-21.1
Quintile 2	21.86	21.1-22.5
Quintile 3	23.02	22.5-23.6
Quintile 4	24.74	23.6-26.2
Quintile 5	29.30	26.3-36.8



Annual Mean PM2.5 Concentrations (µg/m3)

CalEnviroScreen (2015-2017)

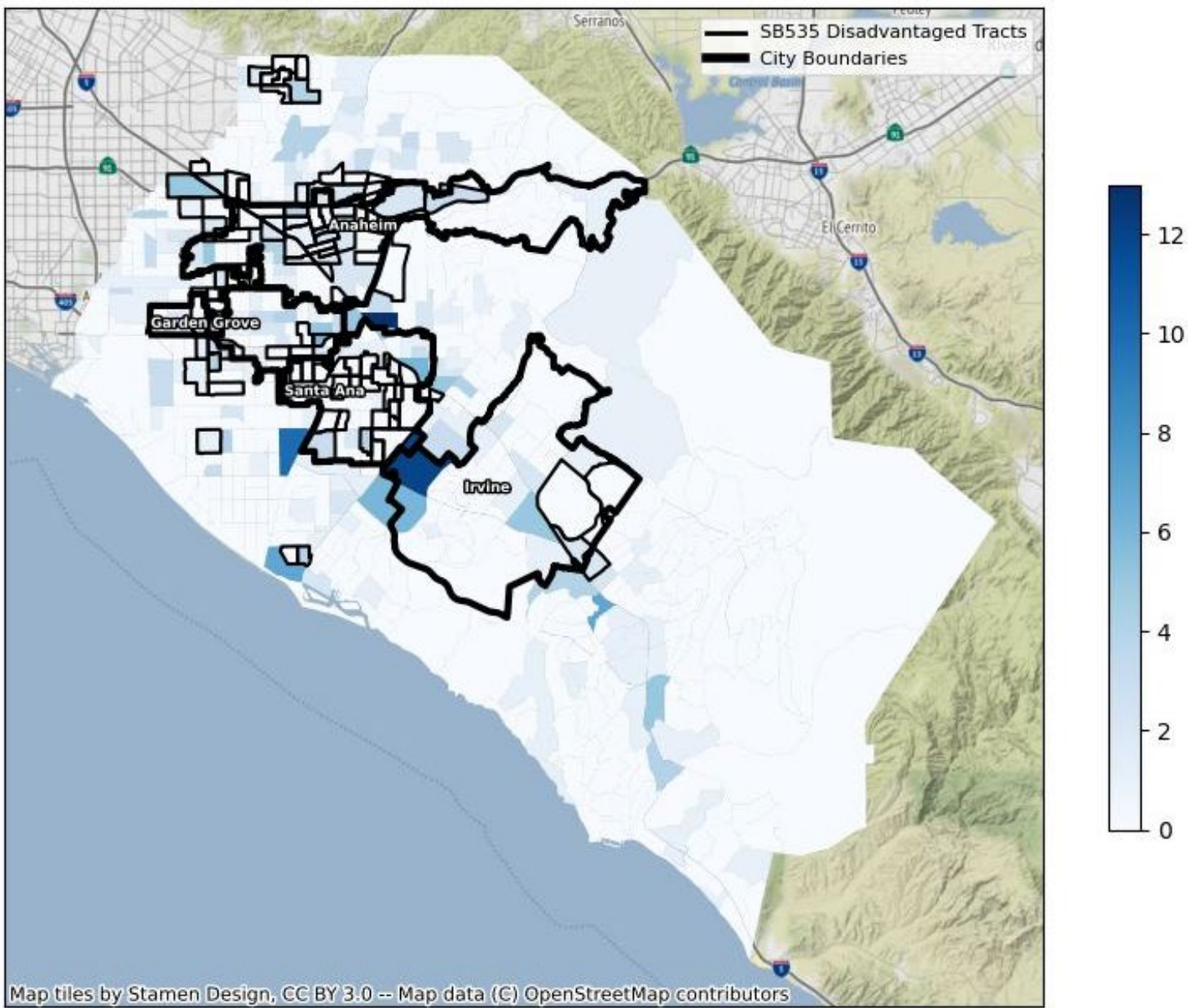
Category	Mean	Range
Full County	11.27	8.39-12.21
Disinvested	11.88	9.81-12.21
Non-Disinvested	11.16	8.39-12.21
Quintile 1	9.56	8.39-10.42
Quintile 2	11.12	10.43-11.47
Quintile 3	11.67	11.47-11.83
Quintile 4	11.91	11.83-12.0
Quintile 5	12.08	12.0-12.21



Number of Healthcare Facilities (hospital, mental health, rehab, surgical, etc.)

California Health and Human Services (2023)

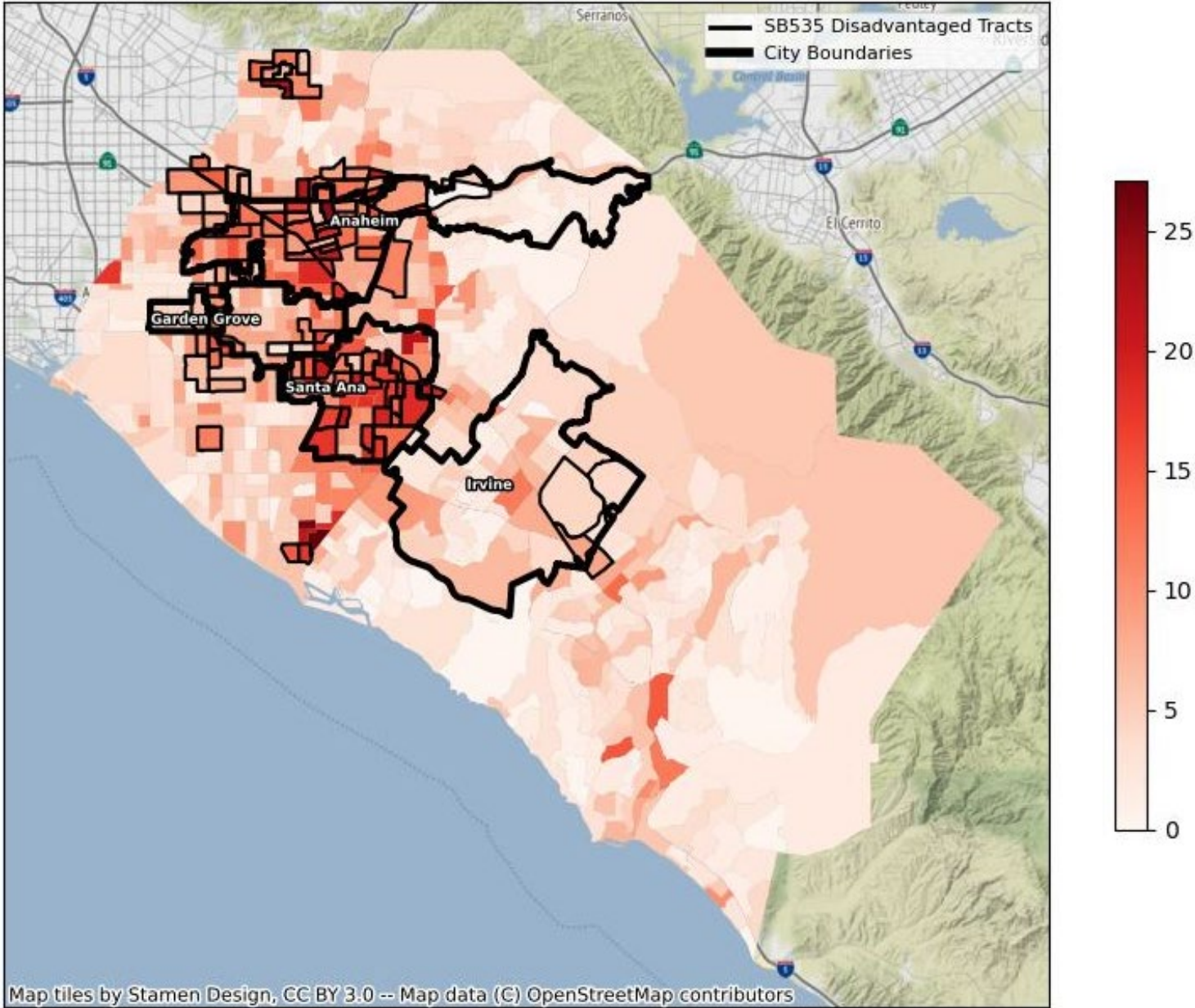
Category	Mean	Range
Full County	0.63	0.0-13.0
Disinvested	0.81	0.0-6.0
Non-Disinvested	0.59	0.0-13.0
Quintile 1	0.00	0.0-0.0
Quintile 2	0.00	0.0-0.0
Quintile 3	0.00	0.0-0.0
Quintile 4	0.44	0.0-1.0
Quintile 5	2.70	1.0-13.0



Percent of Uninsured Individuals

ACS 2017-2021 5-Year Estimates

Category	Mean	Range
Full County	6.64	0.0-27.14
Disinvested	12.76	0.0-24.49
Non-Disinvested	5.51	0.0-27.14
Quintile 1	1.24	0.0-2.17
Quintile 2	3.16	2.18-4.14
Quintile 3	5.25	4.19-6.62
Quintile 4	8.35	6.63-10.76
Quintile 5	15.22	10.79-27.14



Public Health Analysis, Takeaways

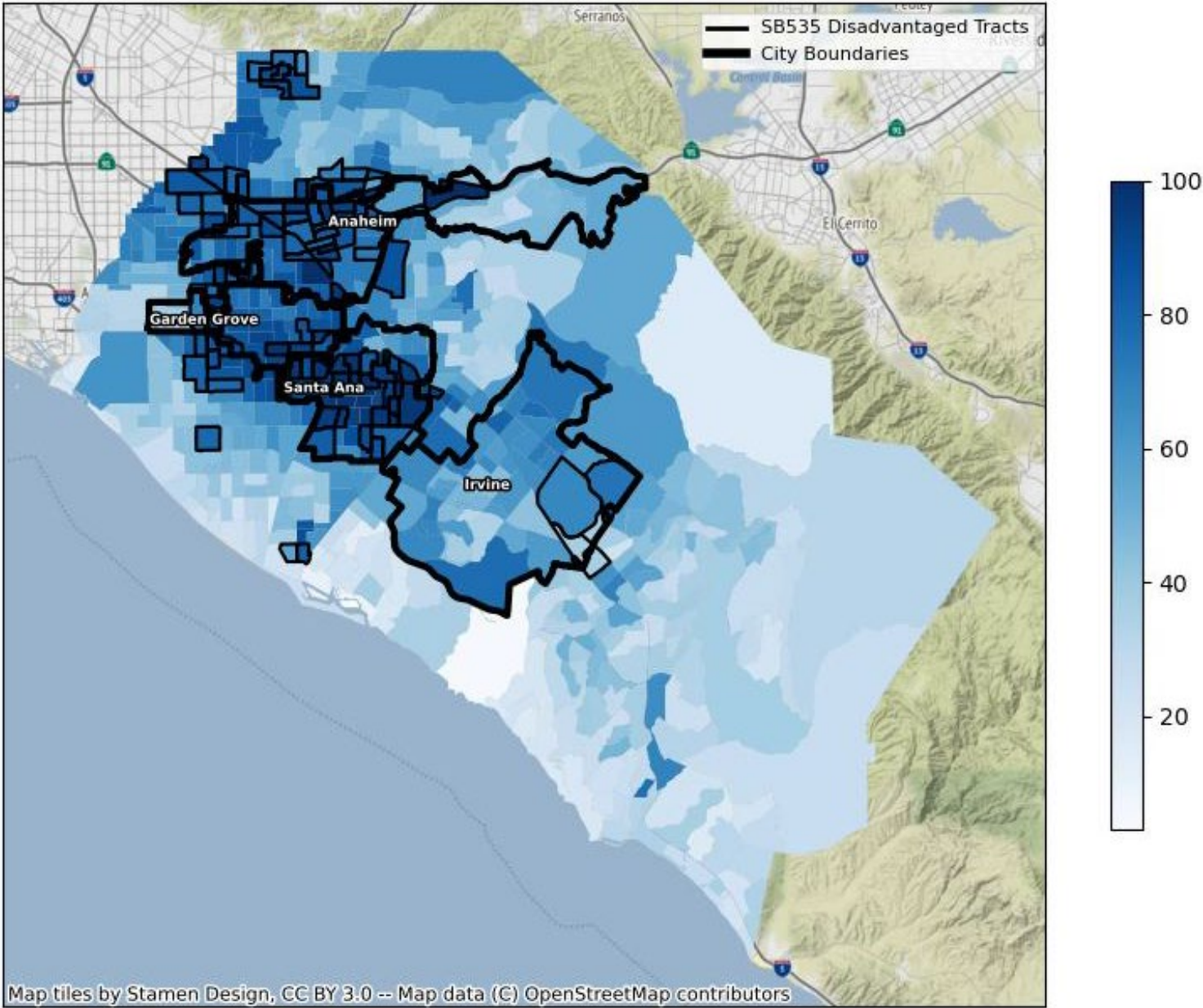
- Disadvantaged communities are closer to health care facilities (hospitals)
- That physical access does not translate into access to health care resources
 - 12.7% of persons in disadvantaged communities lack health insurance, compared to 6.6% in the balance of Orange County
- Resource disparities translate into disparities in health outcomes
 - Life expectancy at birth varies by almost ten years across census tracts.
 - Mid-point of the highest quintile (coastal, upper income) is 85 years
 - Mid-point of lowest quintile (central, lower income) is 78
 - Asthma visits per year (per 10,000 persons) ranges from 16 to 49 annual visits at the mid-point of the lowest and highest quintiles, again roughly coastal/upper income to central/lower income – a three-fold difference.

Addendum: Demographic, Income, and Poverty Data

Percentage Minority Population (Hispanic/Latino or Nonwhite Census Definition)

ACS 5-year estimates 2016-2020

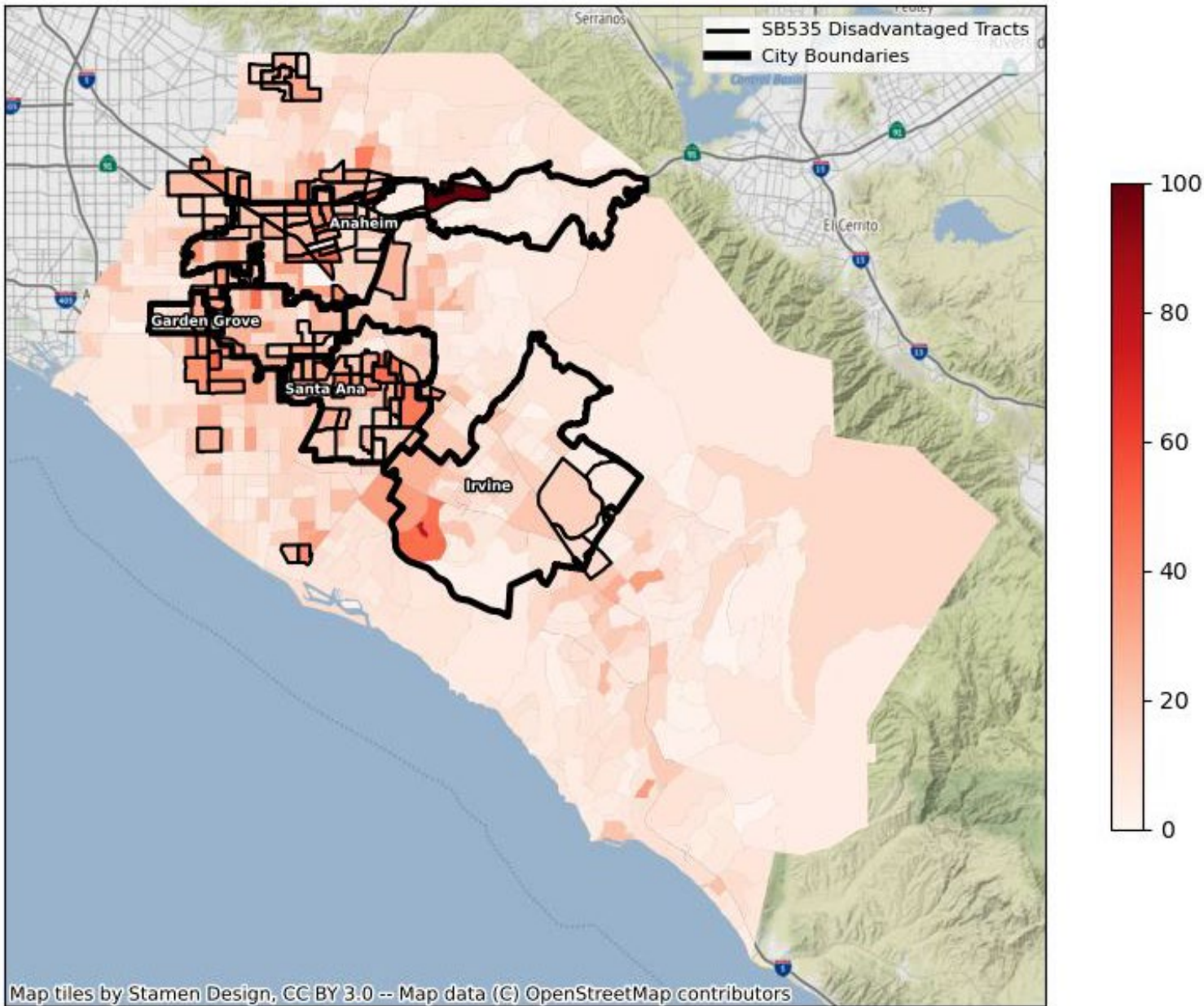
Category	Mean	Range
Full County	56.98	3.2-100.0
Disinvested	85.77	37.2-100.0
Non-Disinvested	51.63	3.2-100.0
Quintile 1	25.17	3.2-33.5
Quintile 2	40.39	33.6-46.6
Quintile 3	55.38	47.2-64.7
Quintile 4	73.84	65.0-81.7
Quintile 5	90.12	81.8-100.0



Percentage of Population Under 150% of the Federal Poverty Guidelines

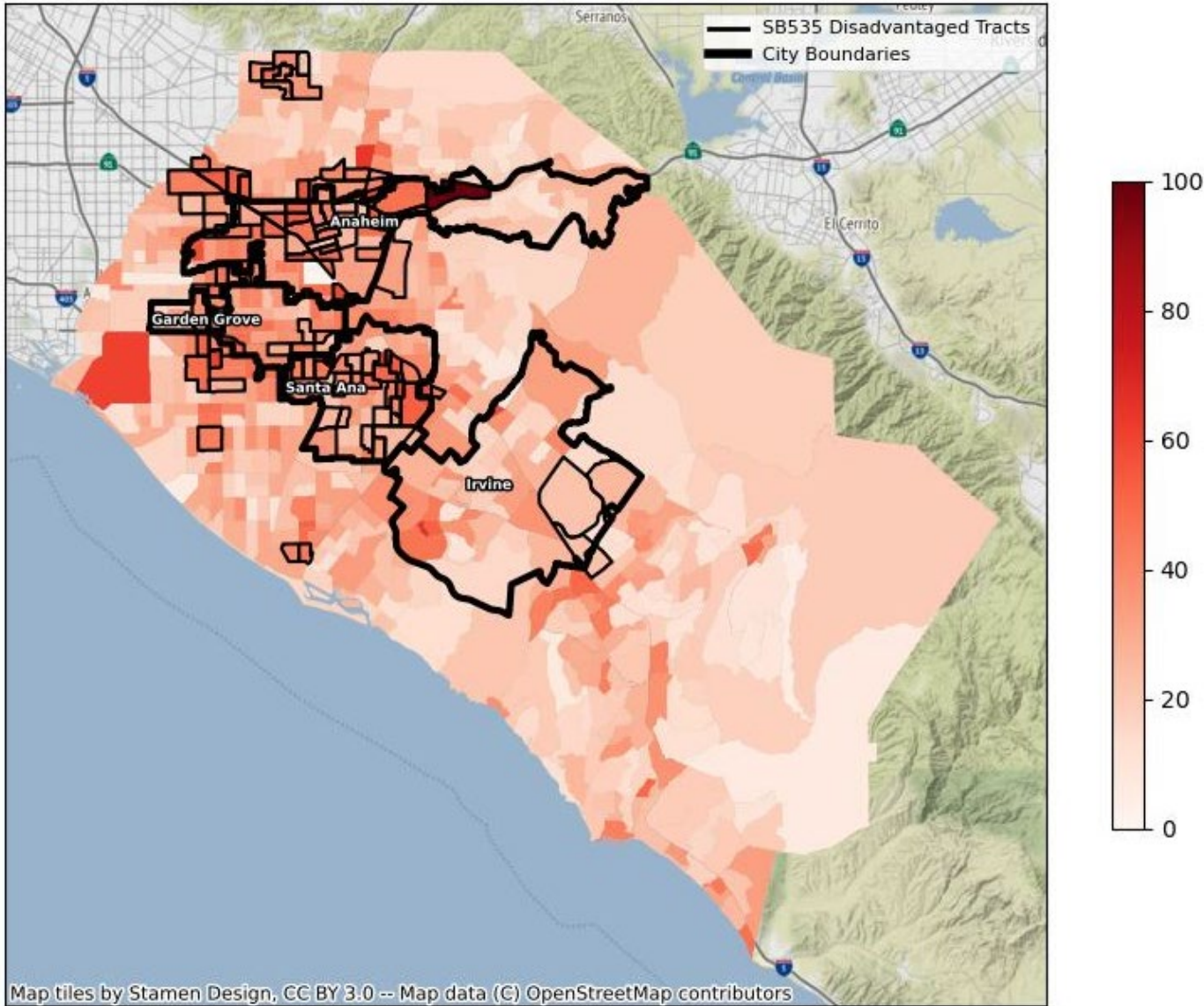
ACS 5-year estimates 2016-2020

Category	Mean	Range
Full County	16.20	0.0-100.0
Disinvested	28.83	4.3-100.0
Non-Disinvested	13.85	0.0-77.6
Quintile 1	4.91	0.0-7.0
Quintile 2	9.03	7.1-10.9
Quintile 3	13.32	10.9-16.0
Quintile 4	19.73	16.0-24.8
Quintile 5	34.00	24.9-100.0



Percentage of Housing Units with Income Under \$70,000 and >30% of Income Spent on Housing

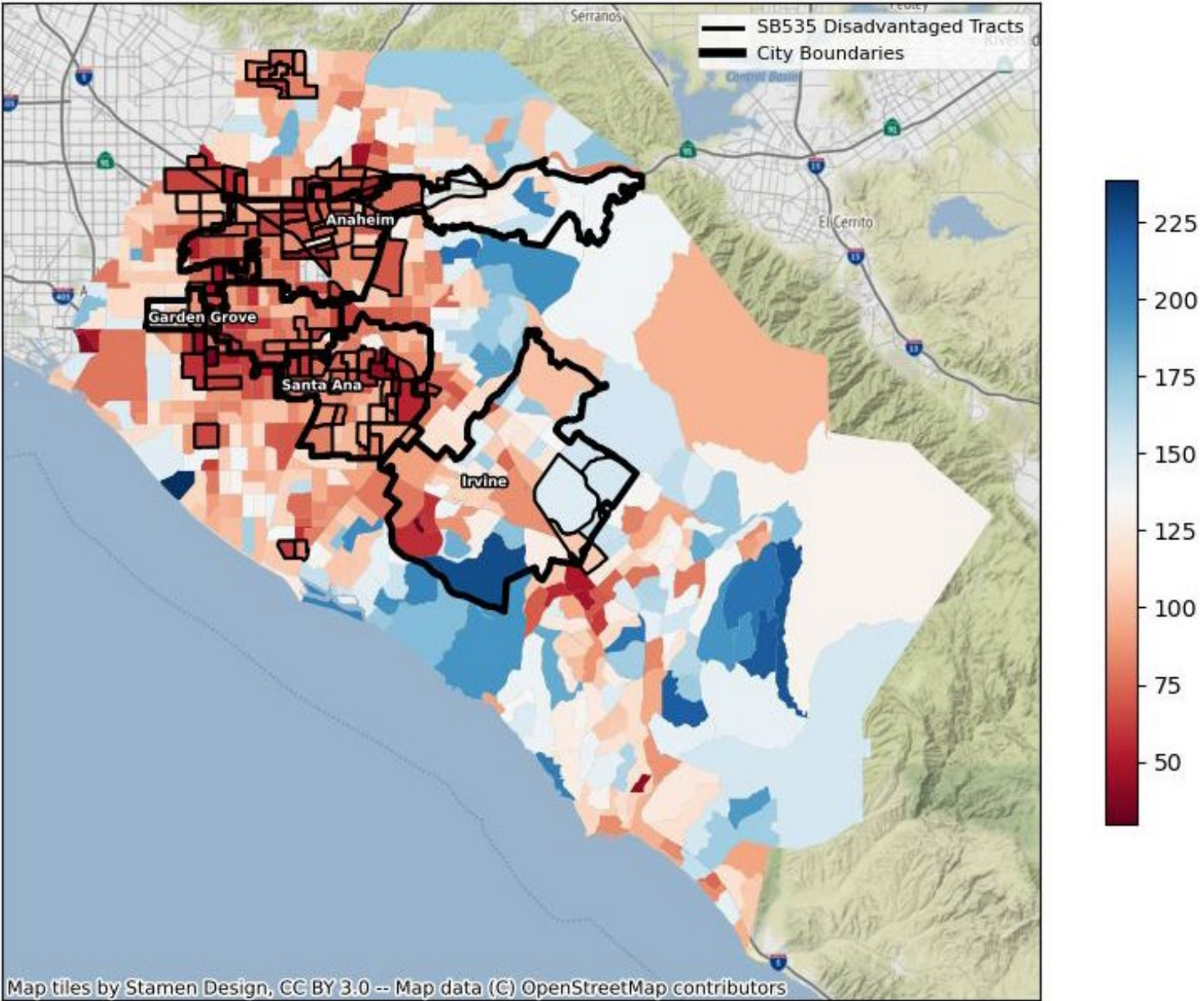
Category	Mean	Range
Full County	28.84	0.0-100.0
Disinvested	41.06	21.4-100.0
Non-Disinvested	26.57	0.0-65.6
Quintile 1	13.43	0.0-17.6
Quintile 2	20.52	17.6-23.8
Quintile 3	27.49	23.9-31.4
Quintile 4	35.28	31.4-39.8
Quintile 5	47.48	39.8-100.0



Median Annual Household Income (in \$1,000s)


ACS 2017-2021 5-Year Estimates

Category	Mean	Range
Full County	107.50	29.92-239.05
Disinvested	74.14	34.01-152.09
Non-Disinvested	113.65	29.92-239.05
Quintile 1	62.48	29.92-74.88
Quintile 2	83.24	75.18-92.18
Quintile 3	102.18	92.58-111.18
Quintile 4	123.74	111.25-138.26
Quintile 5	165.77	138.41-239.05



CERF Research Approach

- As data layers become available, the HRTC will be provided with PP presentations to collect feedback and additional areas to review.
- During the whole process, questions and feedback are documented.
- Researchers will follow up on feedback and supplemental research.
- Researchers will begin to write the narrative that goes with the data.
- The narrative and data will be brought back to the HRTC multiple times.
- To support the HRTC in engaging in this work, there will also be a GIS Map Portal.



Orange County CERF SWOT Analysis

Strengths, Weaknesses, Opportunities and Threats

Strengths

- **Increasingly Diverse Population:** Growing levels of Asian and Latino residents provide new concepts, ideas, and trends.
- They also lead to **International Connections** that help international trade, and attract international businesses and entrepreneurs.
- **Highly Educated and Qualified Workforce:** Orange County enjoys one of the most well educated populations in the nation, which is a significant competitive advantage.
- **Central Geographic Location in Southern California:** Proximity to major population and employment centers, including Los Angeles and San Diego.
- **Highly Interconnected Transportation Infrastructure:** Access to major rail lines, freeways and highways, logistics infrastructure, and proximity to major international seaports and airports.
- **World-Class Educational and Research Institutions:** Home to world-class K-12 education, colleges, universities, and research institutions creating significant economic opportunity.

Strengths (continued)

- **World-Famous Tourist Attractions:** OC's Hospitality & Tourism consistently brings in tourists globally and generates tax revenue for jurisdictions and creates jobs that serve as onramps to the labor force.
- **Consistently Lowest Unemployment Rate in the Region:** A workforce at near full employment highlights the benefits of an Orange County location for both employers and employees.
- **High Levels of Internet Connectivity:** This is increasingly important in a post-COVID career and educational landscape.
- **Strong and Concentrated Industry Clusters:** Focused industry clusters, such as Medical Devices, provide a number of key advantages for OC, including job creation and high multiplier effects that ripple throughout the economy.
- **Diverse, Well-Rounded Economy:** Not dependent on a single industry makes OC economy more resilient to economic shocks. Orange County is a large prosperous economy that has demonstrated a history of resilience and is well-positioned to succeed over the next several years

Strengths (continued)

- More.....
- More.....
- More.....



Weaknesses

- **Lack of Unified Regional Economic Development Vision:** A more collaborative approach between local municipalities could better spread economic growth across all Orange County communities.
- **Labor Force Gap:** With an aging population and out-migration trends, Orange County's talent pipeline faces increasing pressures over the next several years
- **Housing Gap -- Low-Income and Affordable Housing Options:** A lack of affordable housing pushes county residents into overcrowded units, homelessness, or to relocate to more affordable areas nearby and commute to work.
- **Increasingly High Cost of Living:** OC's increasingly high cost of living is beginning to affect not only low-income individuals, but middle-income families as well.
- **Decreasing Availability of Land for New Housing Construction:** Demand for new housing units are outpacing developers' ability to create new affordable homes.
- **Vulnerability to Natural Disasters:** Orange County has experienced disruptive floods, fires and landslides in recent years. Earthquakes are another long-term risk. Earthquakes are a long-term issue
- **Child Care Supply and Cost:** Orange County's child care industry is the workforce behind the workforce. Child care is critical for working parents, cities, and the economy.

Weaknesses (continued)

- **Environmental/Sustainability Challenges:** The combination of aging and undersized infrastructure, urban development and climate change has catalyzed significant and growing environmental challenges in Orange County including heat waves, air pollution, flood risk and coastal erosion including beach loss.
- **Impact of AI/Automation:** is happening at an accelerated pace because of wage inflation and staffing shortages (2022: 30% of work tasks are automated; 2025: 50% of work tasks will be automated). In the next 3 years, ~12M US workers (nearly 9% of the workforce) will need retraining based on AI's impact
- **Uneven Outcomes:** Orange County residents overall achieve better outcomes in terms of higher education attainment, work, and prosperity when compared to statewide averages. However, a closer examination of the data reveals that this success is not evenly distributed across the County. Without addressing these disparities, Orange County risks leaving behind significant portions of its population, which could ultimately hinder the County's overall economic and social development.
- **Elevate Disinvested Communities:** The county's ability to lift up disinvested communities will depend in part on its ability to provide education and training opportunities for members of these communities in nontraditional ways, such as apprenticeships, enabling them to participate more fully in the county's future growth.

Weaknesses (continued)

- More.....
- More.....
- More.....



Opportunities

- **Promote Innovation & Entrepreneurship:** Expanding partnerships between academia, business, community-based organizations, philanthropy and government could accelerate innovation, start-ups and new business creation with incubators, accelerators, makers spaces, and increased access to capital, with a particular focus on entrepreneurs from backgrounds who have been historically disinvested in.
- **Leveraging Shifting Age and Ethnic Demographics:** Healthcare will play an increasingly important role in Orange County as the population continues to age and Healthcare technology continues to evolve. This is an opportunity for a significant number of higher wage jobs as well as an opportunity to expand access for a healthier community.
- **Leverage Existing and Emerging Industry Clusters:** Reinforce support for high-performing sectors such as Medical Devices and emerging sectors such as clean tech. An unprecedented amount of public and private dollars to develop more environmentally sustainable technologies, Orange County can position itself to be a leader in the development of these technologies and be home to yet another well-paying industry cluster, while enabling the globe to meet the demands of climate change.
- **Career Technical Education:** Like the rest of the country, Orange County is seeing significant job growth in good-paying “middle-skills” occupations that do not require a Bachelor’s degree.

Opportunities (Continued)

- **Build Economic Resilience:** Build mechanisms of resiliency in industries that are most impacted by economic shocks and downturns." Is there a way to lessen the impacts in industries like hospitality and tourism.
- **Build a Strong, Inclusive Economy Through Education and Job Creation:** Prioritize creating effective pathways and programs to and through higher education and onto better job opportunities. By engaging employers to support crafting postsecondary and training pathways that equip individuals with the skills and knowledge they need to succeed in the workforce, Orange County can help to close the opportunity gap and ensure that residents are prepared for the jobs of today and tomorrow. This can also ensure that the skills and knowledge that residents gain are aligned with the needs of local businesses and industries.
- **Transform Higher Education:** to meet the needs of today's students, including adult learners, people with dependents, formerly incarcerated individuals, non-English speakers, undocumented persons, and others from marginalized communities, presents a significant opportunity for building a more equitable and competitive society. By expanding access to relevant and flexible educational opportunities, unlock new sources of talent and potential, leading to a more prosperous future for all.

Opportunities (Continued)

- **Develop an Overall Regional Competitiveness Strategy:** Focus on aligning and accelerating investments in infrastructure (e.g., housing, mobility, and transportation) with the intent of driving economic development.
- **Reindustrialization Strategy:** that works to capture, concentrate and re-shores growth among various high-value industries (e.g., R&D, renewable energy production, biotech, manufacturing, industrial design, aerospace, etc.)
- **Regional Career Pathways and Skills-Based Learning Initiative:** To address skills gaps and skills mismatches and further cultivates upstream investments in the talent pipeline, while enhancing access for displaced and/or marginalized workers across a number of sectors.

Opportunities (Continued)

- More.....
- More.....
- More.....



Threats

- **Declining Population:** Like the rest of the state, Orange County experienced net population loss in 2020 and 2021. If this trend continues, issues like declining K-12 enrollment and labor shortages will become self-fulfilling.
- **Affordability and High Cost of Living:** As housing prices and the cost of living reach new highs in Orange County, people find themselves priced out of housing options near places of employment, resulting in increasingly long commutes by living out of OC, or potentially moving out of state altogether.
- **Poverty Rates and Homelessness:** As housing prices and inflation continue to climb, many individuals and families are being pushed to share living spaces, have unstable housing, or be unsheltered putting additional pressures on schools, cities, and public services to address the negative impacts of living in such an environment.
- **Barriers to Entry/Regulatory Environment:** A large number of policies and regulations may impact small businesses ability to grow and prosper, limiting overall economic activity the creation of new businesses.
- **Mental Health Trends:** Already rising pre-COVID, mental health and substance abuse trends have since skyrocketed.

Threats (continued)

- **AI Workforce Training Lagging:** Current workforce training and educational curriculum is not sufficiently focused on teach the skills for "new collar" jobs being created from AI/robotics, like Prompt Engineers.
- **Water Supply Uncertainty:** While the most recent drought has abated, long-term concerns remain regarding water supply and usage and their impact on OC communities.
- **Potential Future Natural Disasters:** Future earthquakes, wildfires, floods, landslides and other disasters have potential implications for infrastructure, construction, transportation and other key sectors.
- **Climate and Urban Sustainability Challenges:** Heat waves, air pollution, flood risk, and coastal erosion caused by aging infrastructure, urban development, habitat change, drought, and climate change are significant.
- **Coastal Erosion:** Cannot be reversed and several areas in Orange County are in danger of generating large economic, recreational, and ecological losses soon with large impacts on the economy and residents who depend on the coastal industry sectors such as retail and tourism.

Threats (continued)

- More.....
- More.....
- More.....

