

Lesson/Week 12 :

Neighborhood Health

- ✓ **Neighborhood Characteristics**
- ✓ **Property value as a predictor variable (King County, Washington State)**
- ✓ **Education, Occupation and Home Ownership as Predictor Variables (Alameda County)**
- ✓ **Income as a Predictor Variable (Bexar County, Texas)**

Neighborhood Characteristics

Density, **Housing**, Income, Education, **Occupation**, Health facilities, Schools, **Crime**, farmers' markets, supermarkets, **fast food restaurants**, liquor stores; **safe, well-tended parks**; littered, empty lots; **trees and green open spaces**; **pedestrian friendliness** (able to walk to school and shops on safe sidewalks, clean streets); housing conditions (maintenance and quality, **peeling or lead paint or mold**, **proper heating** and cooling, adequate number of bedrooms for family size); **bike lanes**; condition of school buildings; **neighborhood connected** to rest of community, jobs; heavy traffic and freeways; **polluting industries** and toxic hazards; **noise level**; street plan / housing that isolates or connects residents, promotes or discourages **social interaction**, payday lenders, **juvenile delinquency**, probation, **gangs**, immigration status, domestic abuse, drugs, voting record, social justice (activism), environmental justice (activism), criminal justice (activism).

Excerpts from an online publication: "WHY PLACE MATTERS "

<http://www.policylink.org>

Overview:

"One number may determine how healthy you are and how long you live. It is not your weight, cholesterol count, or any of those numbers doctors track in patients. It is your **address**."

"If you live in a community with parks and playgrounds, grocery stores selling nutritious foods, access to good jobs and to other economic opportunities, clean air, safe streets, good schools, ample health care and social services, and neighbors who look after one another, you are more likely to thrive. If you live in a neighborhood without these essentials, you are more likely to suffer from obesity, asthma, diabetes, heart disease, or other chronic ailments. You are also more likely to die of a stroke, a heart attack, or certain forms of cancer. You are more likely to be injured or killed during a crime, in a car crash, or simply crossing the street."

"Healthy people and healthy places go together."

"Woven throughout the nexus of health and place is the often unspoken strand of **race**."

Overview....contd

We know that eating well and staying fit is important for health. But in fact, our economic and social environments are even bigger influences on health. Residents of some neighborhoods [zip-codes] live, on average, five, 10 or even 15 years longer than those in other neighborhoods.

Important questions

- ✓ Why is our street address or zip code such a powerful predictor of health?
- ✓ Which features of the local economic, built, social, and service environments promote or threaten the health of residents?
- ✓ Do differences in neighborhood conditions tend to cluster along lines of class and race/ethnicity and thereby give rise to corresponding differences in neighborhood health?
- ✓ Are the differences natural or rather a product of government policy, corporate investment decisions, and imbalances in political power that favor some neighborhoods and harm others?
- ✓ Can these change for the better through economic factors, better urban planning decisions, and community mobilization?

A few examples:

❑ An African American baby in the predominantly low-income neighborhood of West Oakland is 1.5 times more likely to be born premature than a white infant in the Oakland Hills, 7 times more likely to be born into poverty, and 4 times more likely to have parents with only a high school education. The risks accumulate and worsen over the life course of the black baby:

- ❑ *2.5 times more likely to lag in vaccinations as a toddler*
- ❑ *4 times less likely to read at grade level in fourth grade*
- ❑ *5.6 times more likely to drop out of high school*

In adulthood:

- ❑ *5 times more likely to be hospitalized for diabetes*
- ❑ *3 times more likely to suffer a fatal stroke*
- ❑ *2 times as likely to die of cancer*
- ❑ The West Oakland infant can expect to die almost 15 years earlier than the white infant born in the Oakland Hills.

Economically distressed communities

✓ Least access to essential services such as grocery stores, medical care, and transportation,

✓ Fewest social supports to overcome or eliminate the obstacles.

“Hundreds of unincorporated communities in California’s Central Valley of California lack even such basics as clean drinking water and sewer systems.”

Residents cannot be healthy if:

✓ Their communities are ailing

✓ The air and water are fouled,

✓ Nutritious food is not available or affordable,

✓ Crime rates and fears of violence keep residents indoors,

✓ Sidewalks and parks do not exist or are too deteriorated for walking and playing.

✓ Opportunities critical for their well-being—education, jobs, good schools, safe and well maintained housing—remain elusive.

“Nearly two-thirds of the children in Los Angeles County—almost all of them kids of color living in low-income neighborhoods—have no park or playground near their homes....”

❑ For residents who manage to adopt healthy behaviors despite the obstacles, the benefits appear to be muted:

❑ Toxic community conditions can trump an individual’s determined effort to rise above them.

❑ A recent analysis of the medical records of more than a half-million Americans found that, regardless of what they eat, how active they are, and other personal factors, residents of poor neighborhoods generally die earlier than people living in wealthier communities.

Community participation

“Recognizing the complex interconnection among issues confronting vulnerable communities, activists in land use planning, transportation, environmental justice, housing, faith communities, and grass-roots groups are formulating an equity-focused agenda that integrates health, job training, environmental quality, and economic vitality.”

“Researchers at the University of California, Davis, are working with the Coalition on Regional Equity (CORE) in the Sacramento area to develop equity indicators and launch efforts to improve access to healthy foods, transportation, and other critical services.”

Community participation...contd

“Grass-roots advocates are also spearheading innovative partnerships to knock down longstanding barriers to health. In low-income communities in Fresno, Los Angeles, Oakland, and San Francisco, residents are approaching local shopkeepers and restaurant owners to sell healthier foods.”

Policy:

“Policies set the rules and parameters for factors that profoundly affect every person’s health: the types of housing, transportation, schools, and services we create and where; the price and availability of healthy and unhealthy food; the kinds of jobs available and to whom; the quality of teachers, the educational standards, and the physical state of school buildings. Policies are set at the local, county, regional, and state levels, and **community participation can have a big impact on what is adopted.**”

Policy.....contd

“Many policies that contribute to racial disparities appear neutral. However, while they may seem to be crafted to apply to everyone, and in some cases to help vulnerable people, their effect is altogether different. For example, **zero tolerance** policies in schools may not appear to be biased; indeed, they are proffered as a response to violence and disruptive behavior that undermine learning and harm young people. But data show these policies do not make schools safer or support learning, and they disproportionately punish students of color, pushing young people out of school or causing them to drop out, increasing their risk of incarceration, and limiting, if not destroying, their life chances.”

Community: Definition

What does “community” mean in hugely varied places? Consider the range in California:

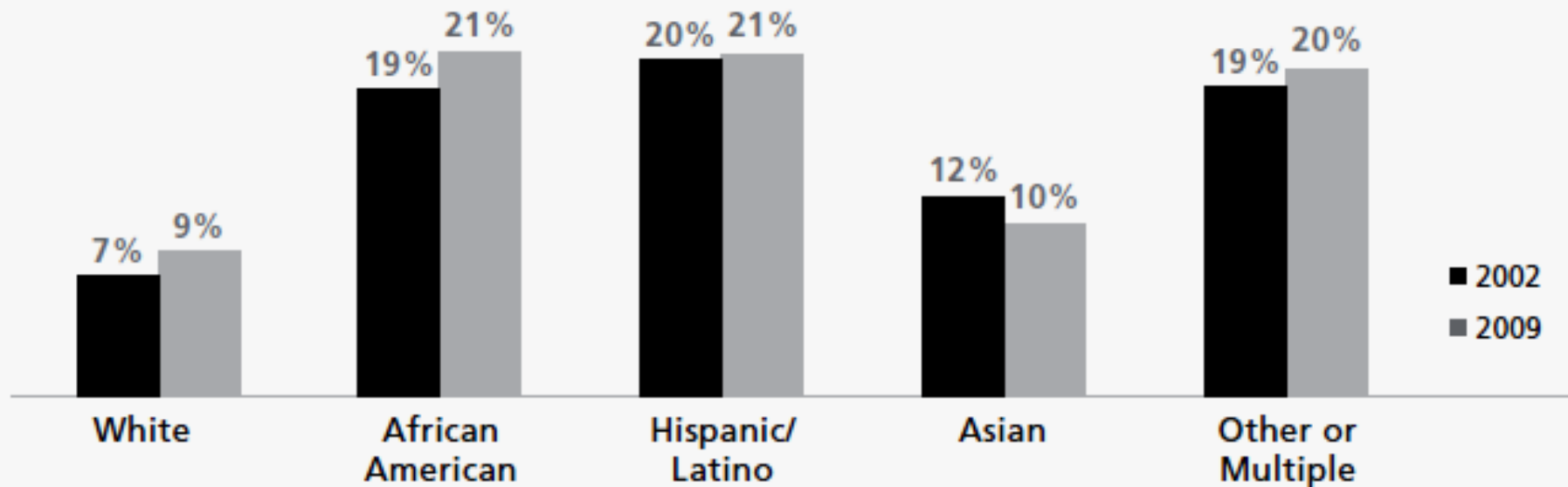
- a) Unincorporated rural areas that lack basic infrastructure such as sidewalks, sewers, and clean drinking water and that represent some of the most marginalized, neglected places in America.
- b) Gateway communities—an initial stop for immigrants intent on moving up and out.
- c) Aging suburbs, with some of the fastest growing rates of poverty in the state.
- d) Inner-city neighborhoods, where long-standing residents of color must contend both with limited mobility and displacement pressure.

What does community mean to diverse residents sharing many of these neighborhoods?

A level playing field:

“A compelling body of research demonstrates that **opportunity** is a leading determinant of health and longevity. To put it another way, disadvantage drives health disparities. On any and every measure of socioeconomic status (SES)—income, savings, education, occupation, social ranking—the evidence is clear: People at society’s lowest rungs are more likely to become sick, more likely to get diagnosed and treated later (if at all), and more likely to die sooner than people higher up the ladder. This is true regardless of a person’s skin color or cultural background.”

Poverty Rates in California by Race/Ethnicity, 2002 and 2009



Source: American Community Survey, 2002 and 2009.

Economic Factors:

“The presence of diverse businesses such as grocery stores, banks, restaurants; opportunities to own homes and build wealth; pathways to jobs and entrepreneurship—a thriving local economy is requisite for healthy communities and the people who live and work there.”

“Conversely, health suffers when a moribund local economy leaves residents to cope with joblessness, the threat of homelessness, and the violence and alienation that can be fueled by dim prospects. Revitalizing the economy of disinvested inner cities, aging and increasingly impoverished suburbs, and isolated rural communities is urgently needed for improving health and reducing disparities.

RETAIL

The vibrancy of a commercial district is a leading indicator of, and a major contributor to, a community's health. When neighborhood businesses are plentiful and robust, they draw foot and car traffic, create local jobs, and stimulate more commerce.

Retail....contd.

"When local businesses wither, communities tend to spiral downward—the tax base shrinks, resulting in public disinvestment. Streets are not swept, and trash piles up. Streetlights burn out and remain dark. Residents must shop outside their neighborhood; and without a vital customer base, new businesses do not locate there. The result: an image of decay that contributes to the overall negative perception of communities of color. Furthermore, blighted commercial corridors depress the values of residential property nearby, making it difficult or impossible for homeowners to accumulate wealth.

Housing.

“Quality affordable housing is the centerpiece of a healthy community—and a perennial challenge in California. Just a few years ago, when the economy was strong, many lower income people struggled with soaring housing costs. **Gentrification** added to the pressures on residents, as some neighborhoods, especially in large cities, attracted affluent newcomers. The problem of housing affordability remains, but it now exists in the context of the subprime lending debacle and the mortgage foreclosure crisis, which have hit the state especially hard.”

“In March 2009, as foreclosure filings reached their peak, five of the nation’s eight metropolitan areas reporting the highest rates were in California: Stockton, Modesto, Merced, Riverside–San Bernardino, and Bakersfield.”

Jobs and workforce development.

“The loss of blue-collar jobs has had its biggest impact on communities of color. While the loss of construction jobs reflects the recent collapse of the residential and commercial real estate markets, which eventually should rebound, the decline in manufacturing jobs signifies the longer-term shift to a service and knowledge-based economy.”

“The economy in each region includes several sectors with significant potential for job growth or jobs to be filled because of retirement and other turnover. Many of these sectors hold genuine opportunities for people in disadvantaged communities to pursue promising career pathways. Successful workforce development strategies call for building partnerships with these sectors.”

The Built Environment

“Substandard housing construction or run-down apartments are another source of pollutants and allergens in low-income communitiesPeeling paint may contain lead, which causes mental and physical developmental delays in fetuses, infants, and children. Deficient housing is correlated [with] greater rates of injuries and higher healthcare costs. There is an emotional toll as well: A study in Detroit found that people living in neighborhoods with a greater number of buildings in poor condition suffered increased stress levels and more symptoms of depression. “

“Landlords in low-income communities are often not held accountable for the conditions of their rentals. **Undocumented** residents are especially vulnerable, fearing deportation or other retaliation should they report code violations. In Los Angeles and Boston, doctors at neighborhood clinics stepped in after seeing patients sickened by mold, rats, cockroaches, broken plumbing, peeling paint, and no heat. The doctors collaborated with lawyers to push landlords to repair and clean up their properties, an example of the important role health professionals can play in building healthier communities....”

Neighborhood Safety and the Criminal Justice System

- ❑ African Americans are locked up at nearly **six times** the rate of whites, and Latinos at nearly **double** the rate of whites.
- ❑ In California, which has one of the highest incarceration rates in the United States (which itself has the highest reported rate in the world), **60 percent of former prisoners return to prison within three years.**
- ❑ Traditional rehabilitation and reentry approaches are failing and draining limited state resources that might otherwise be available for education, health services, and social welfare programs that could keep people out of the criminal justice system. Ex-offenders encounter persistent discrimination and disadvantage once they leave the system and try to find their way in communities and labor markets.”
- ❑ Merely **witnessing a violent act** in one’s neighborhood, even without direct involvement, is associated with symptoms of depression and anxiety.
- ❑ A higher percentage of African Americans than whites **perceive** their neighborhoods to be unsafe, which deters them from walking or encouraging their children to play outside. High crime rates and perceptions that a neighborhood is unsafe are associated with higher risks of disability and immobility,

Three examples

King County: Washington State

Alameda County: California

Bexar County: Texas

King County, Washington, 2010 , Population total 1,916,441

White	67.5%	map
Black or African American	6.5%	map
American Indian and Alaska Native	1.0%	
Asian	14.0%	
Native Hawaiian and Other Pacific Islander	0.7%	
Two or more races	3.4%	
Hispanic or Latino (of any race)	8.1%	

King County: Obesity study

Soc Sci Med. 2007 Dec;65(12):2458-63. Epub 2007 Aug 29.

Disparities in obesity rates: analysis by ZIP code area.

[Drewnowski A](#), [Rehm CD](#), [Solet D](#).

Source

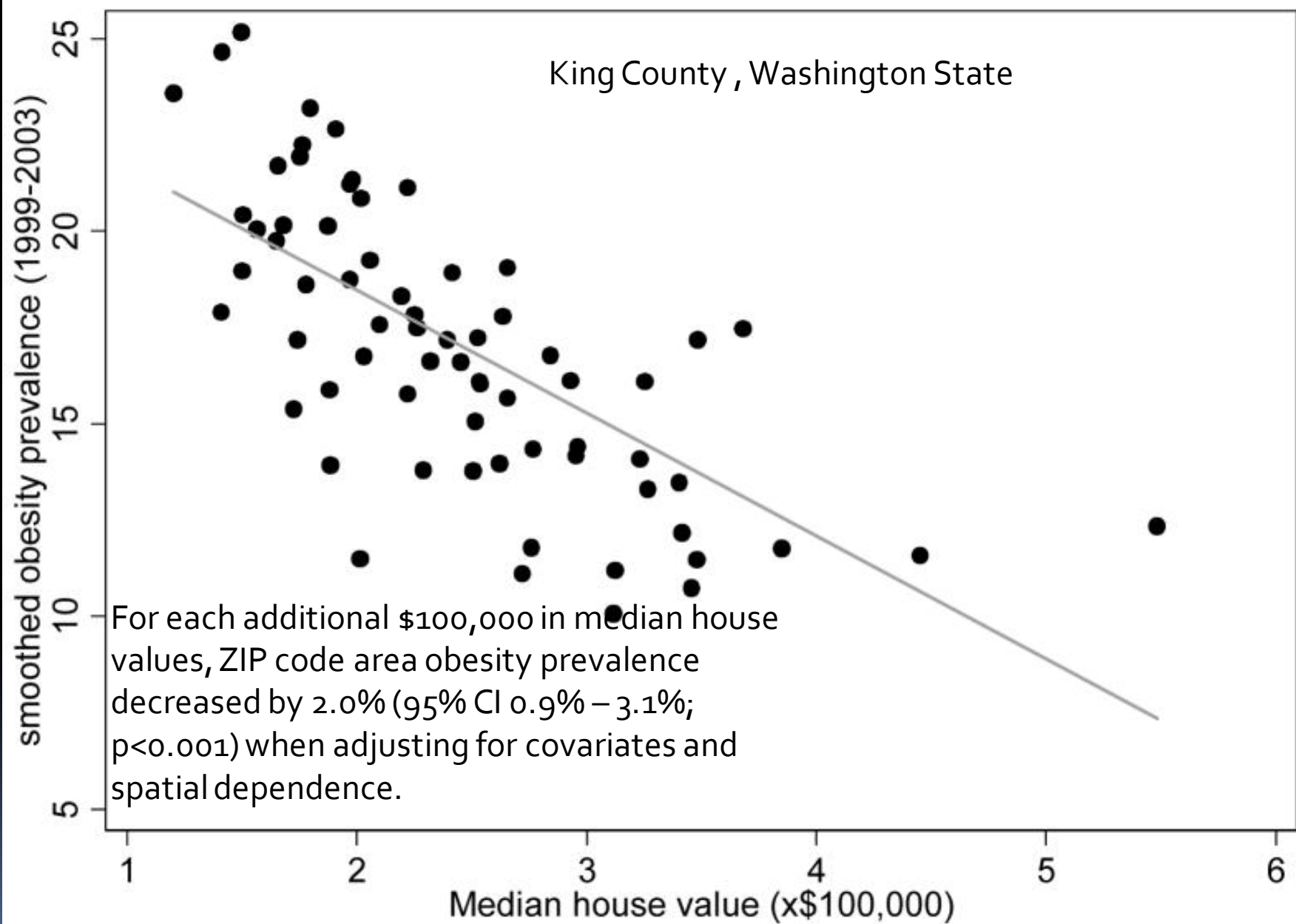
University of Washington, Seattle, WA, USA. adamdrew@u.washington.edu

<http://www.ncbi.nlm.nih.gov/pubmed/17761378>

Abstract

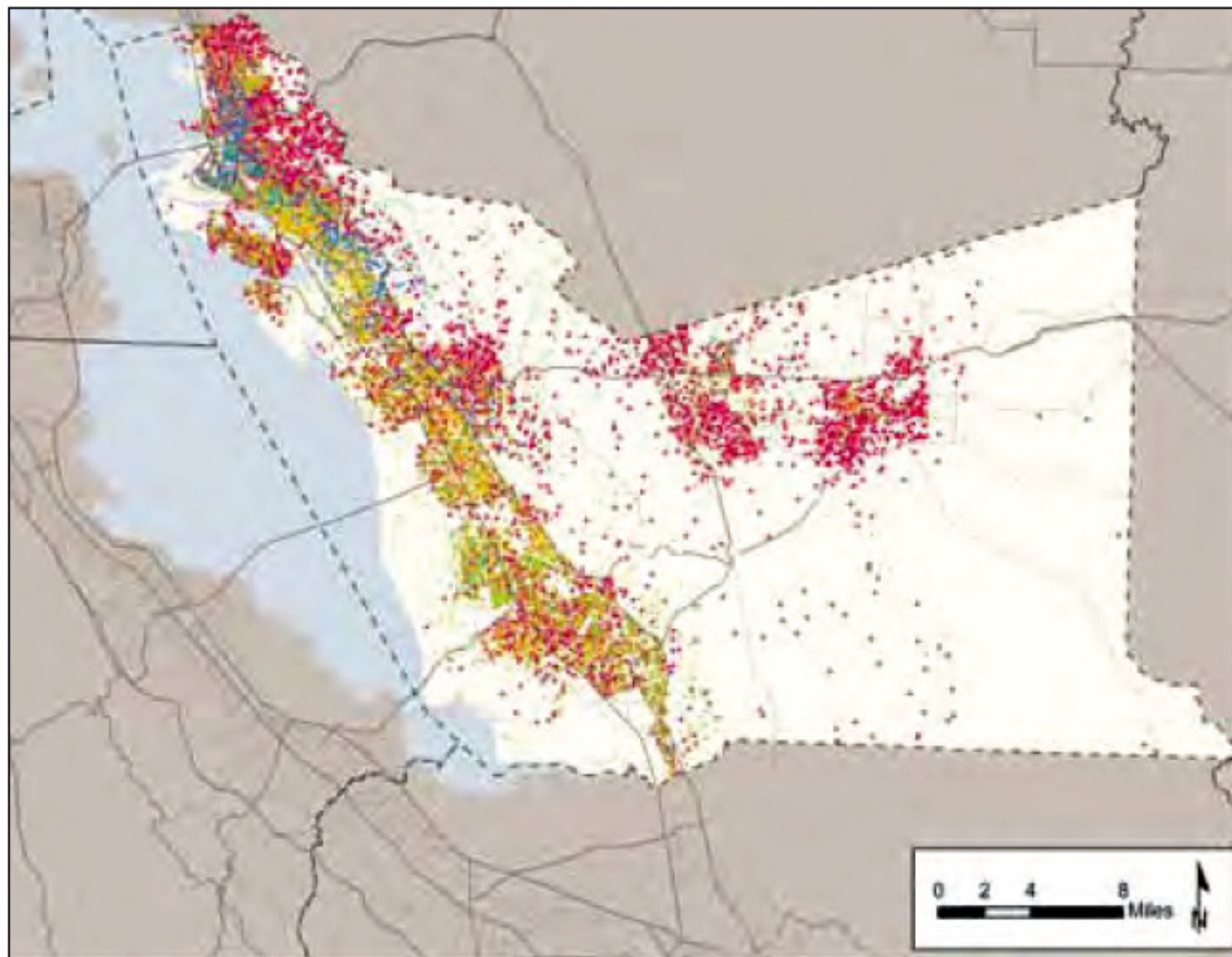
Obesity in the United States has been linked to individual income and education. Less is known about its geographic distribution. The goal of this study was to determine whether obesity rates in King County, Washington State, at the ZIP code scale were associated with area-based measures of socioeconomic status and wealth. Data from the Behavioral Risk Factor Surveillance System were analyzed. **At the ZIP code scale, crude obesity rates varied six-fold.** In a model adjusting for covariates and spatial dependence, property values were the strongest predictor of the area-based smoothed obesity prevalence. Geocoding of health data provides new insights into the nature of social determinants of health. **Disparities in obesity rates by ZIP code area were greater than disparities associated with individual income or race/ethnicity.**

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2709073/figure/F3/>



Alameda County : Population 2010 = 1,491,482

White not Hispanic	36.4%
Black or African American	13.2%
American Indian and Alaska Native	0.7%
Asian	25.4%
Native Hawaiian and Other Pacific Islander	0.7%
Two or more races	3.8%
Hispanic or Latino (of any race)	21.9%



Population by Race

1 dot = 100 people

● Asian

● Black

● Hispanic

● White

--- County Boundary

— Highway / Road

This map of the racial composition of Alameda County contains the type of data utilized by the Bay Area Regional Health Inequities Initiative to address health disparities.

Map created by PolicyLink, January 2011.

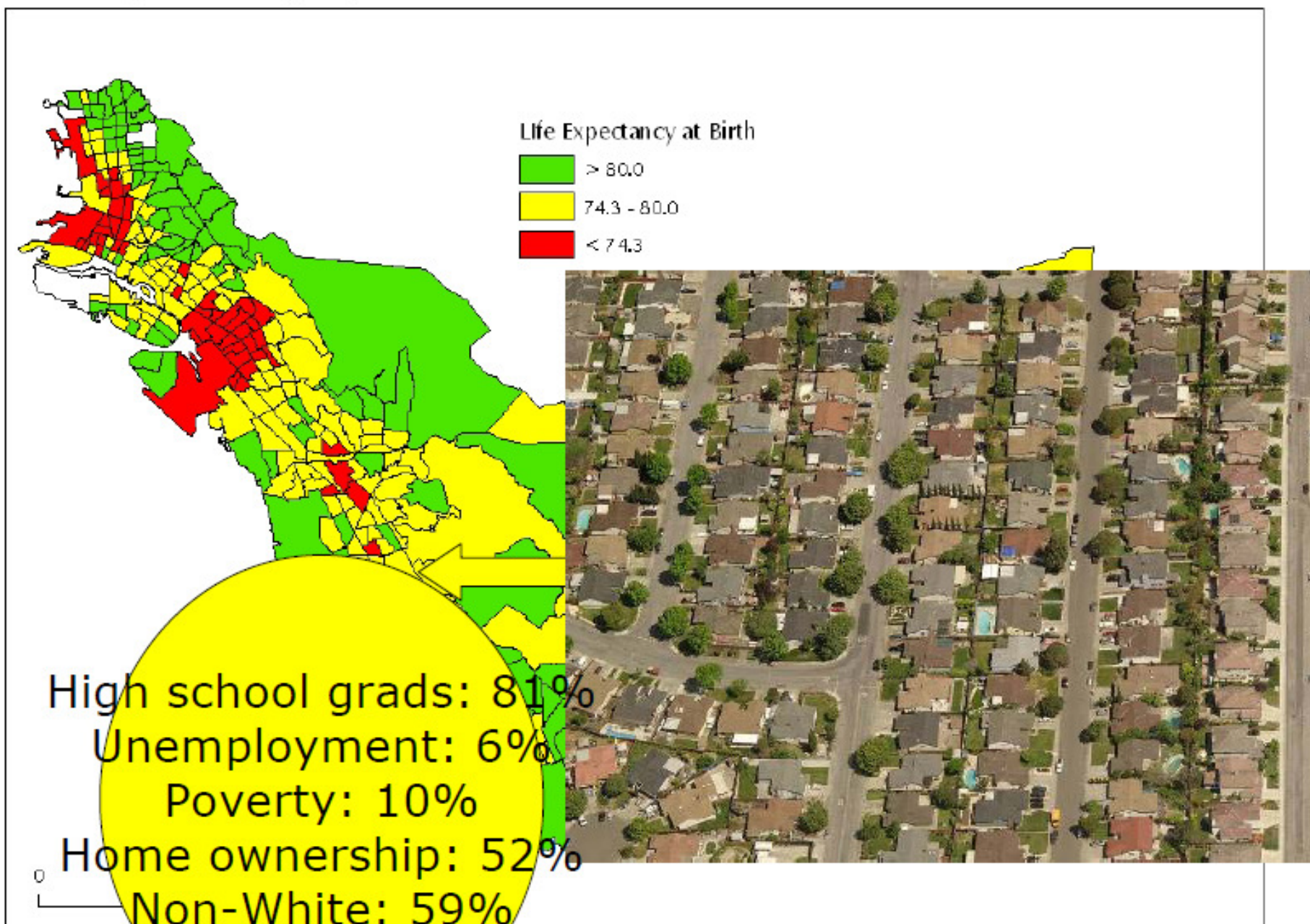
Source: American Community Survey 2005-2009.

<http://www.policylink.org>

Life Expectancy by Tract



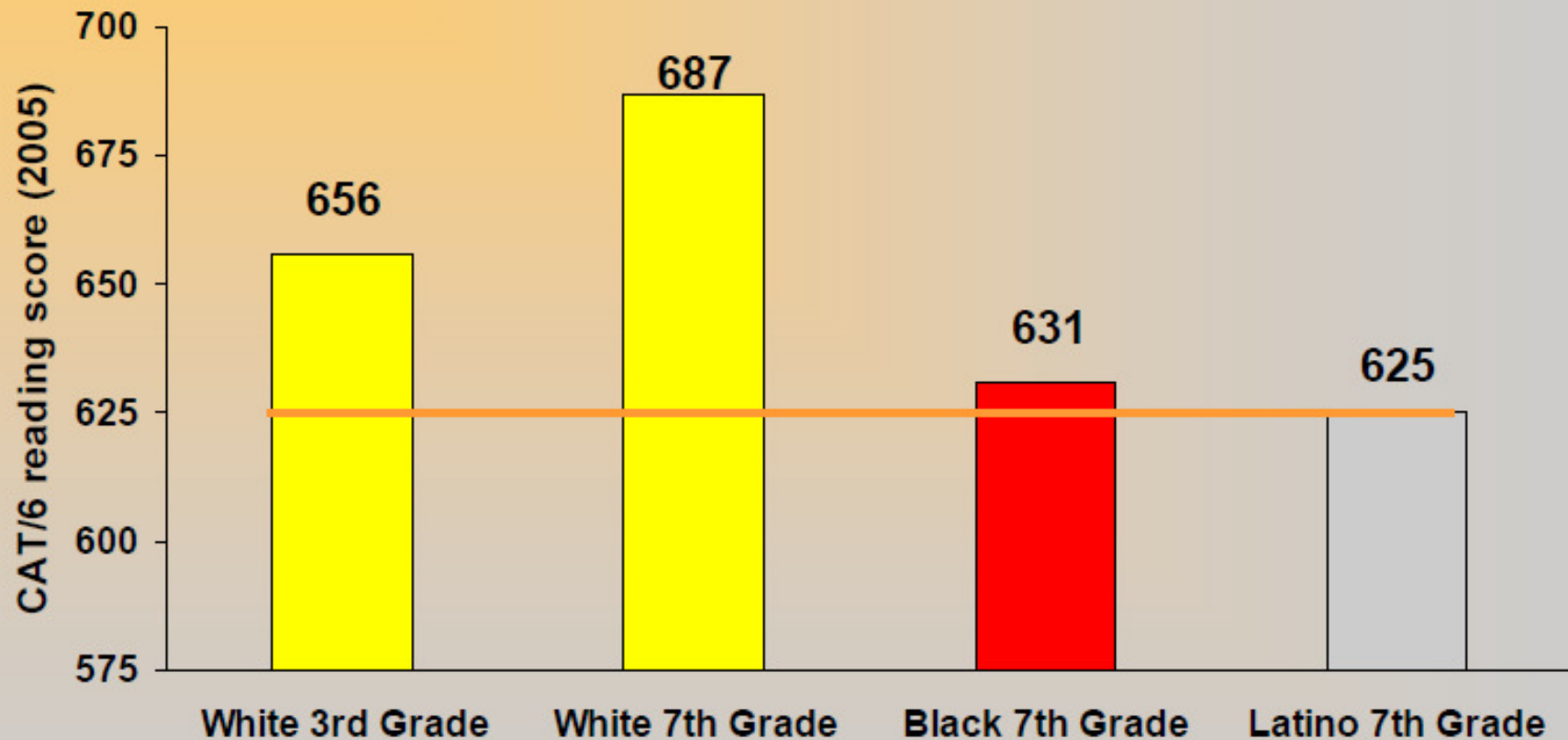
Life Expectancy by Tract



Life Expectancy



In Oakland, African American and Latino 7th graders read below the level of White 3rd graders

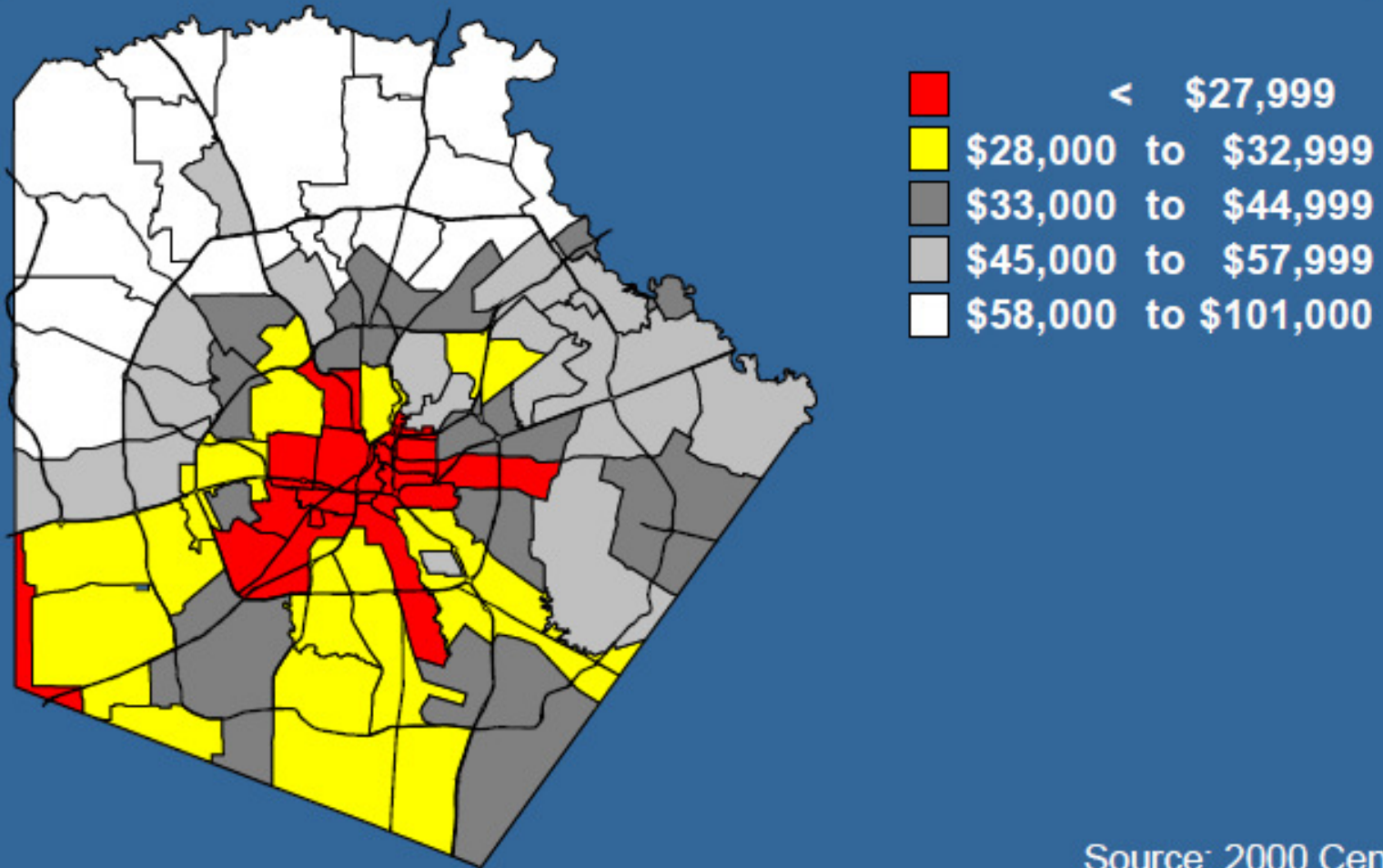


CAT/6 2005

Bexar County, Texas

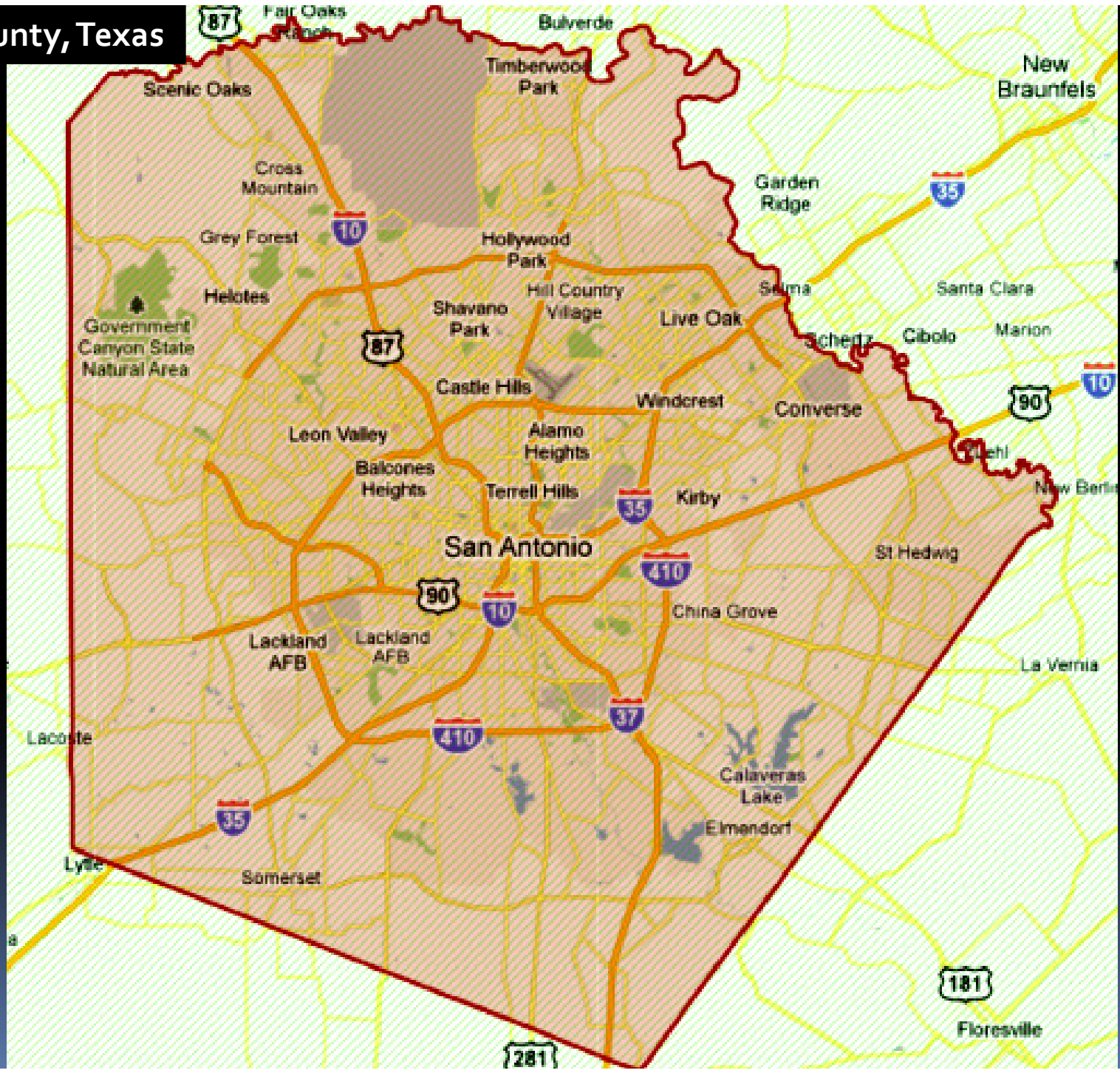
Total population	1,651,448
Hispanic or Latino (of any race)	58.3
Black	7.8
Asian	2.2
Two or more races	0.1
White, not Hispanic	31.3

Median Household Income

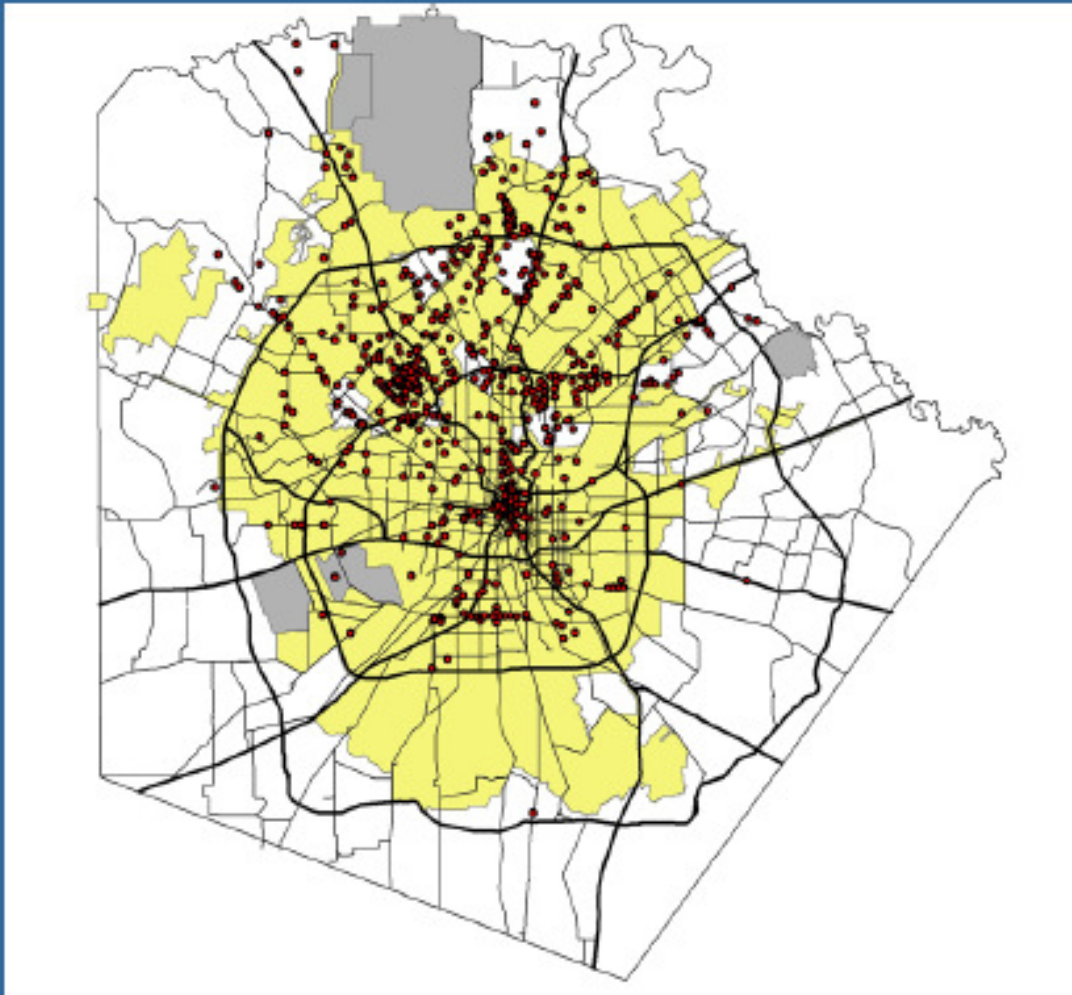


Source: 2000 Census

Bexar County, Texas

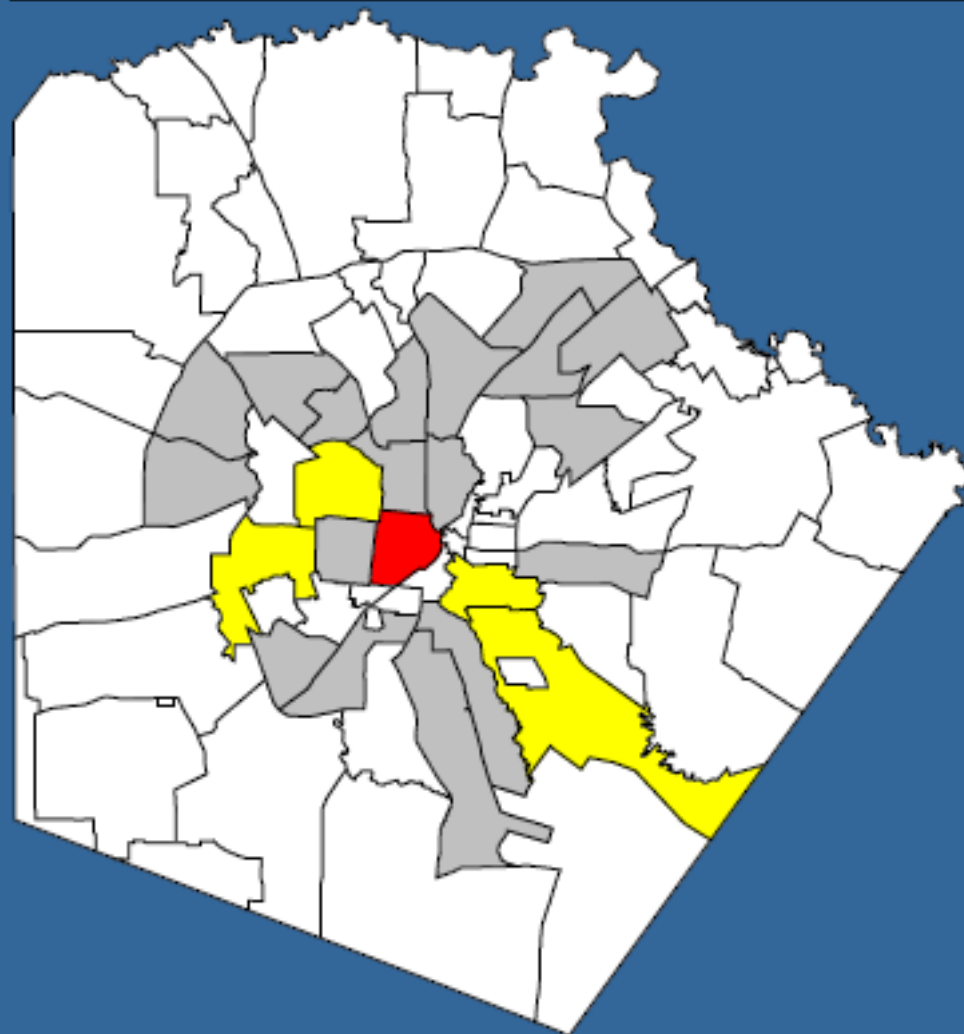


Distribution of Physician Offices



Source: Bexar County
Medical Society

2008 Family Violence Reports



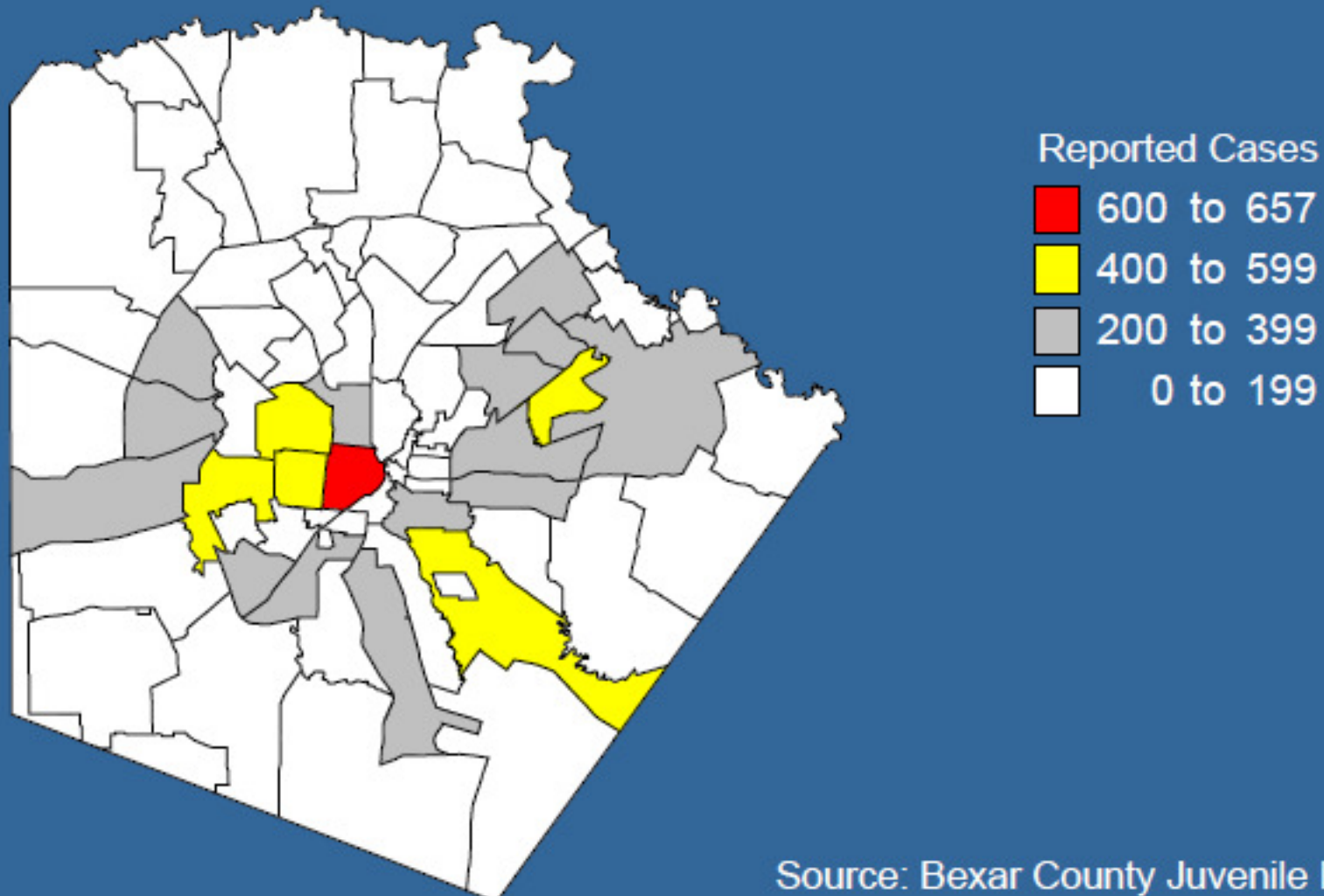
Reported Cases

Red	600 to 760
Yellow	400 to 599
Gray	200 to 399
White	0 to 199

10,547 total cases

Source: SAPD

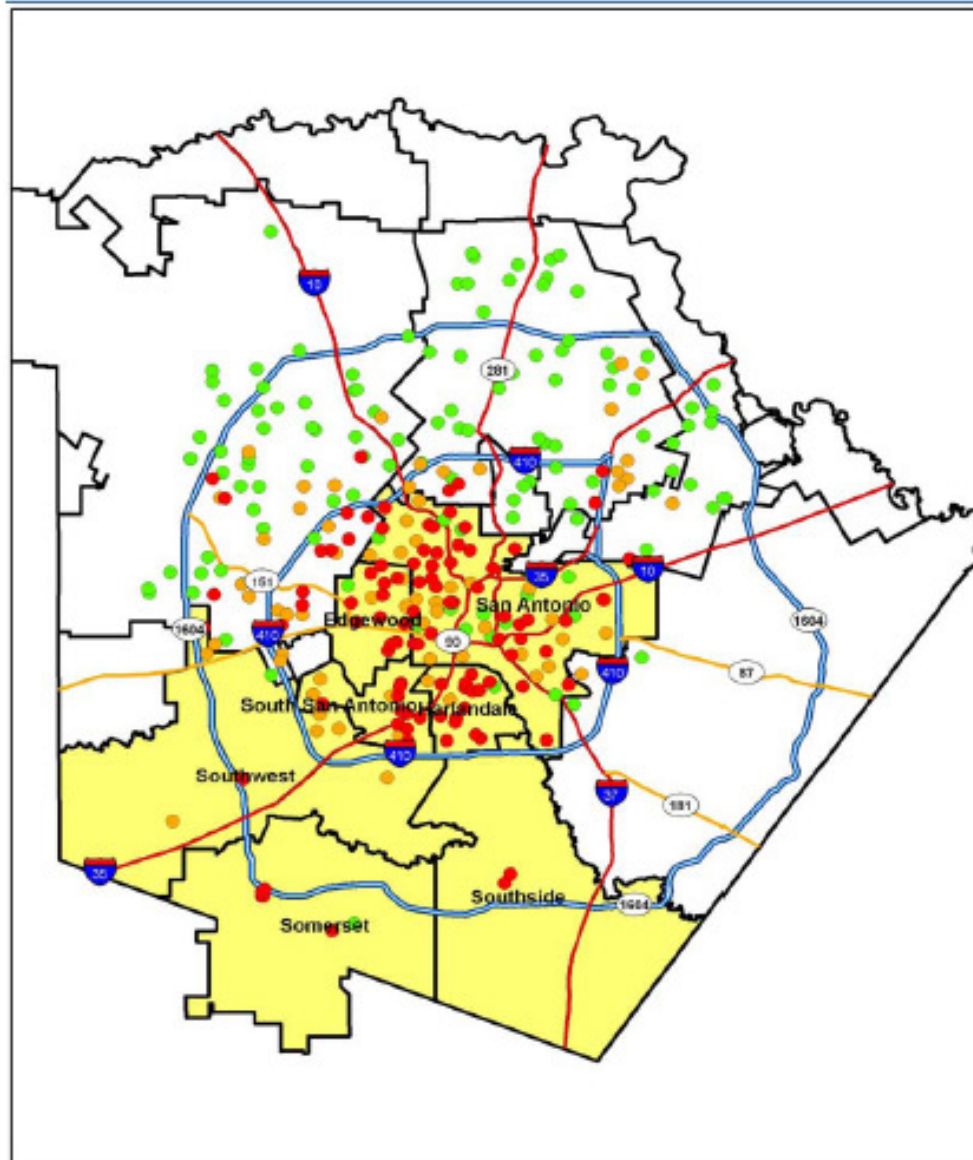
2008 Juvenile Probation Referrals



Source: Bexar County Juvenile Probation

<http://www.sanantonio.gov/health/pdf/NACCHO%2010%20Zip%20Codes.pdf>

Prevalence of Obesity and Overweight in Bexar County Children by Campus and School District



% Unhealthy Weight by Campus

- under 29%
- 29% to 36%
- 37% to 67%

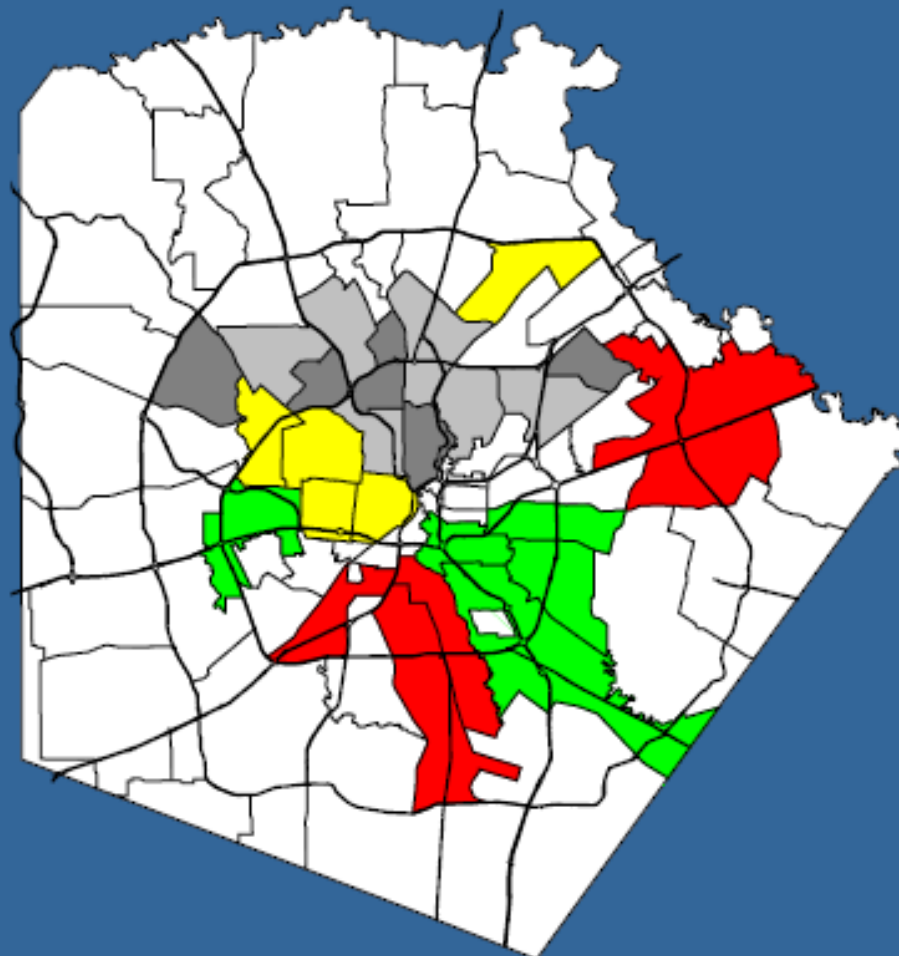
School Districts > 35% Unhealthy Weight

According to FITNESSGRAM a Healthy Weight equals BMIs ranging from 14.7-27.8 for boys and 16.2-27.3 for girls adjusted for age. FITNESSGRAM includes Grades 3-12 with approximately 175,000 Bexar County students tested. 70% of these students were considered Healthy Weight.

Source: 2009 FITNESS GRAM
Texas Education Agency

METRO HEALTH
SAN ANTONIO'S PUBLIC HEALTH TEAM

2006 Diabetes Mortality Rates



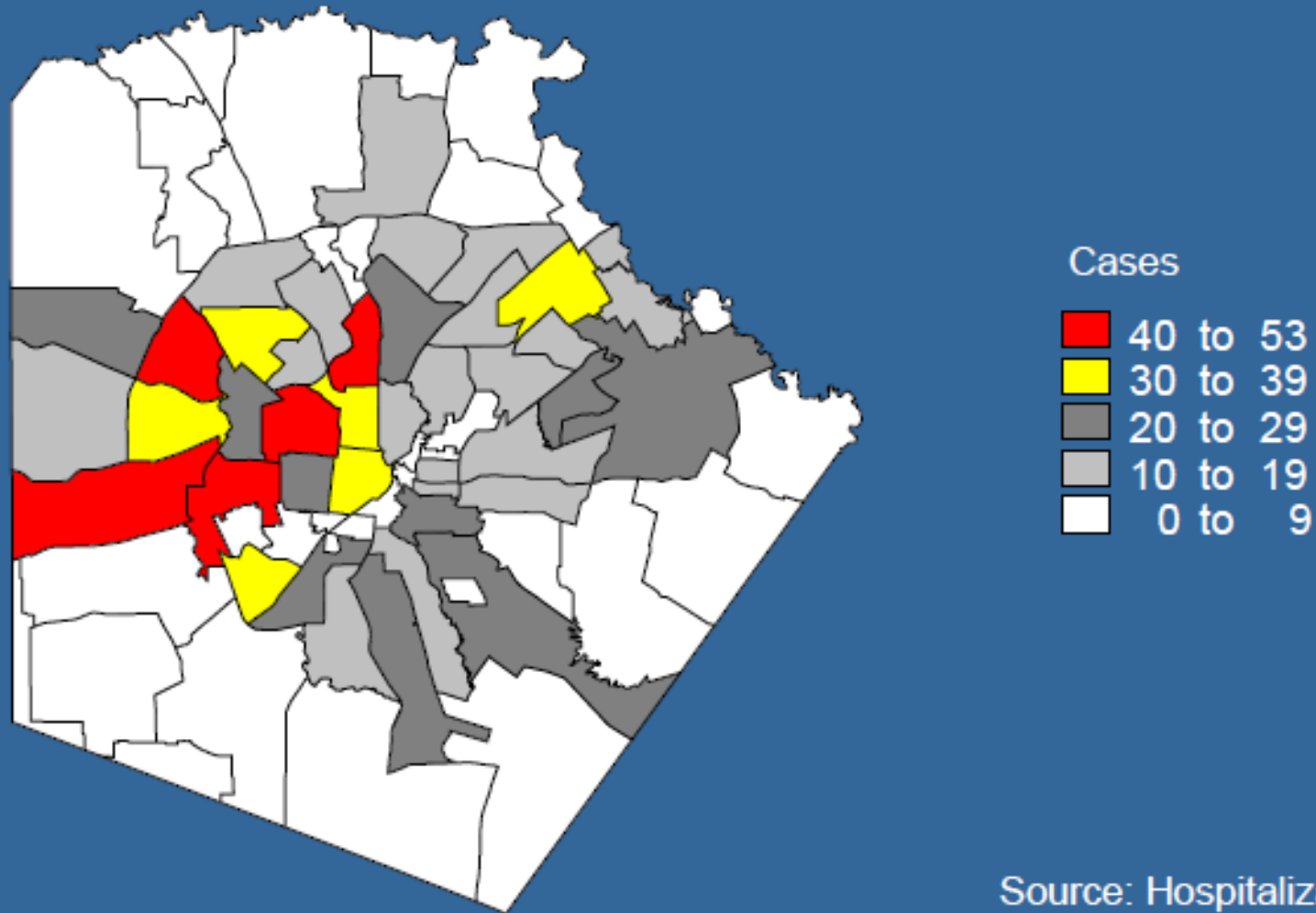
Age Adjusted Rates

Red	209 to 251
Yellow	186 to 209
Green	144 to 186
Dark Gray	116 to 144
Light Gray	77 to 116

- Deaths in which Diabetes listed as primary or contributing cause of death
- Age Adjusted Death Rate calculations use 2000 standard
- Zip codes with fewer than 20 deaths did not have rates calculated

Source: TX DSHS Death Certificates

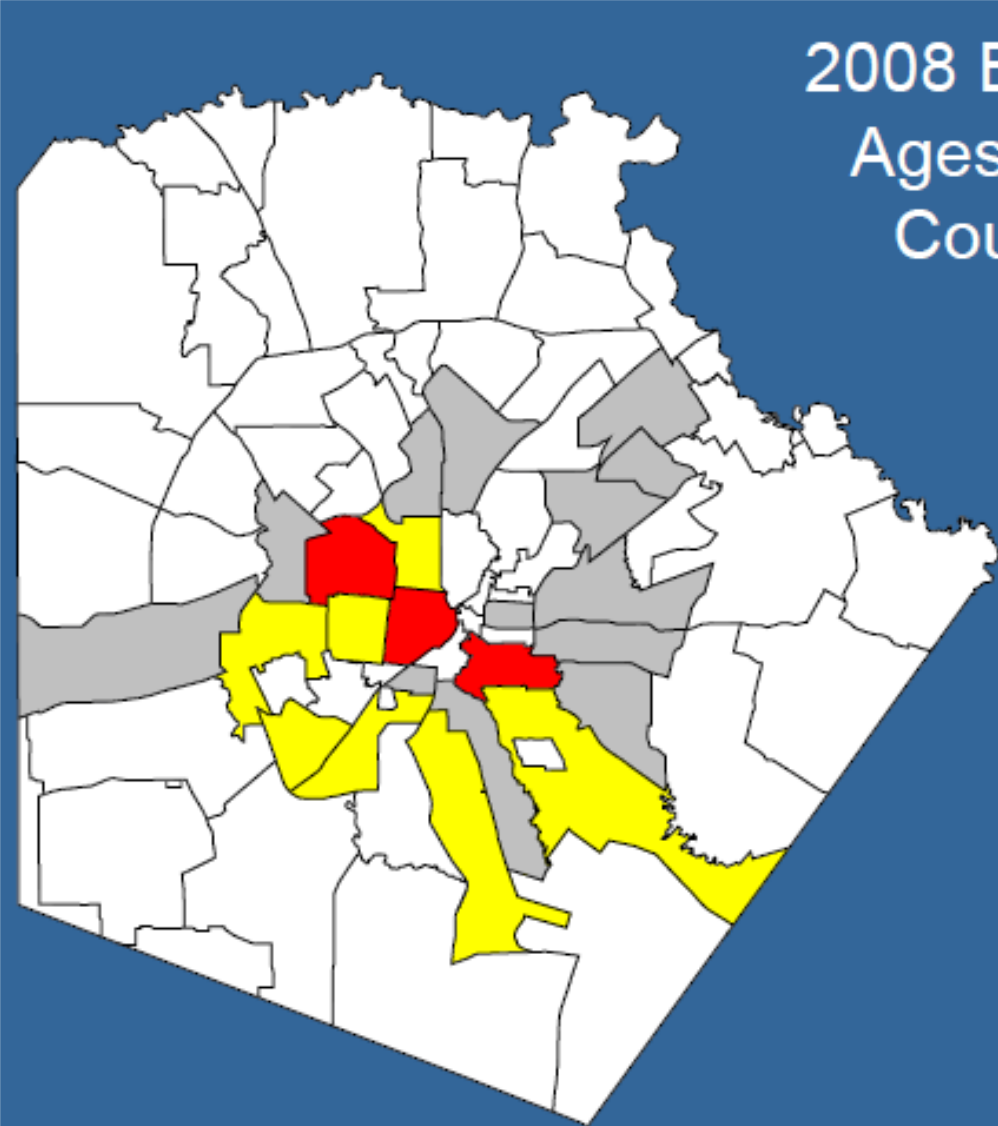
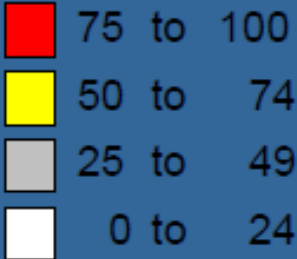
2007 Pediatric Inpatient Admissions for Asthma



Source: Hospitalization Data

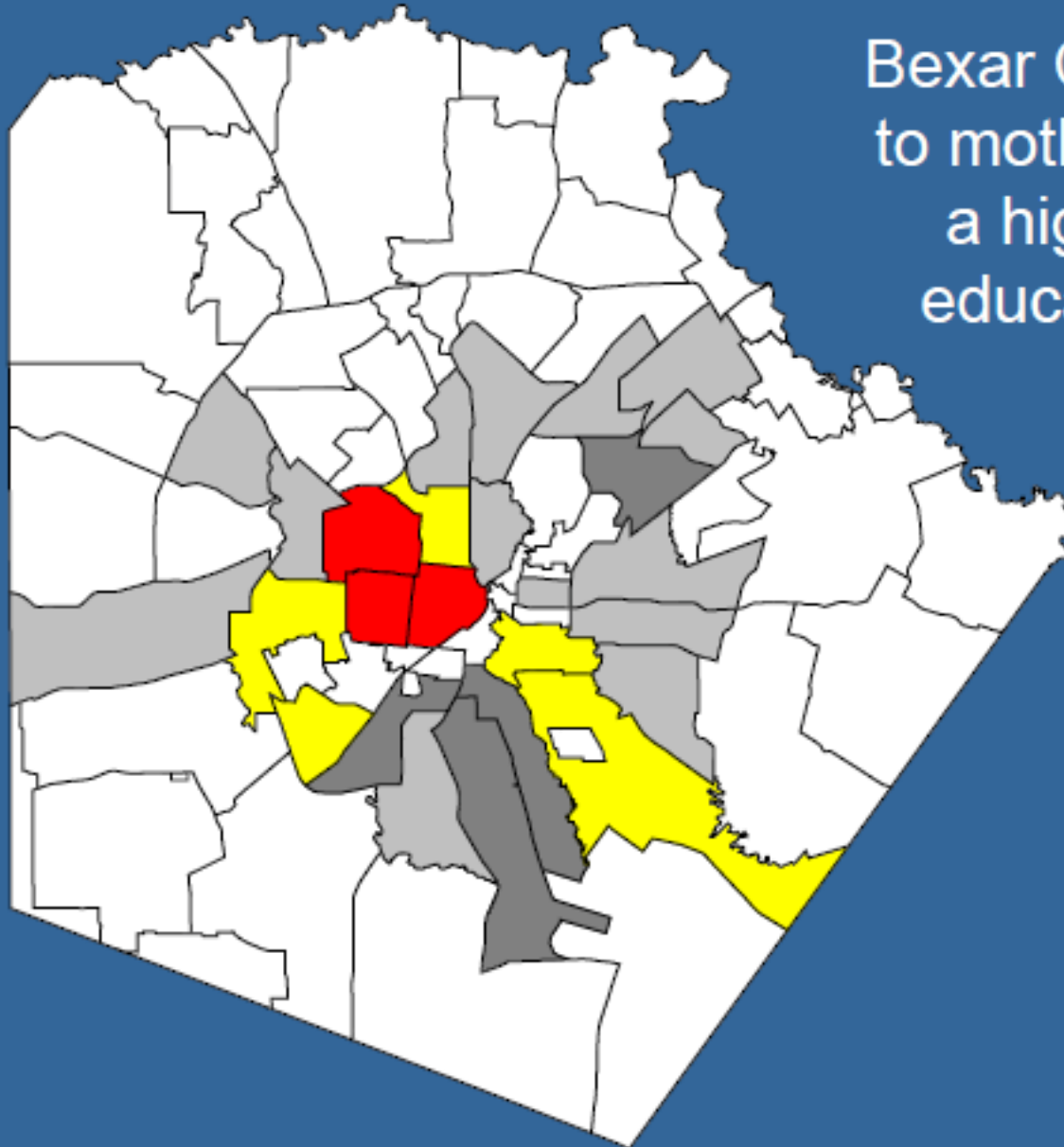
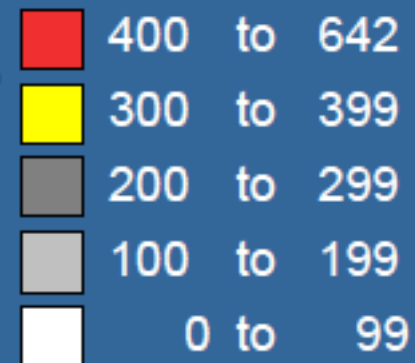
2008 Births to Mothers Ages < 18 by Bexar County Zip Code

Number of births

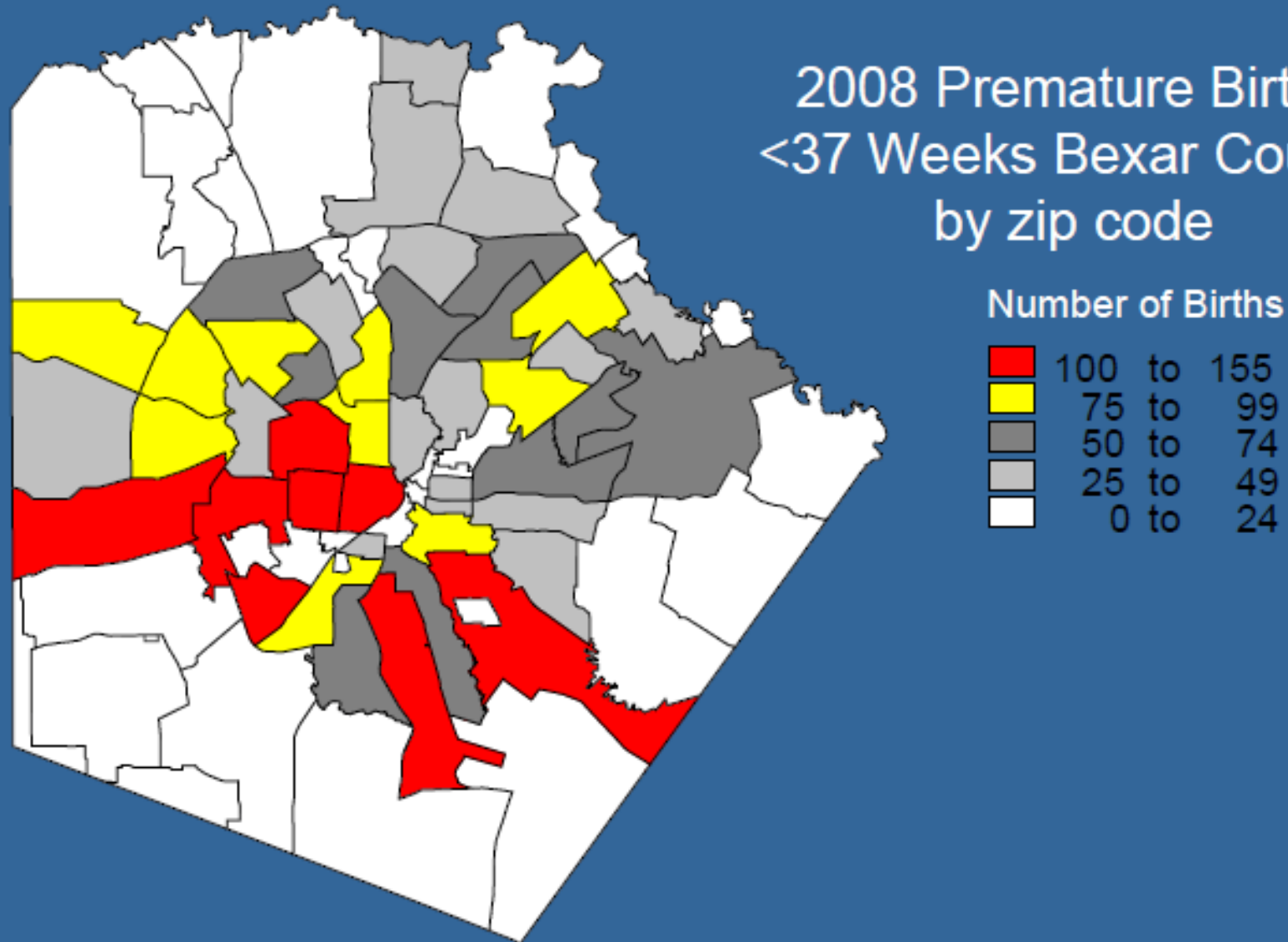


Bexar County 2008 Births to mothers with less than a high school / GED education by zip code

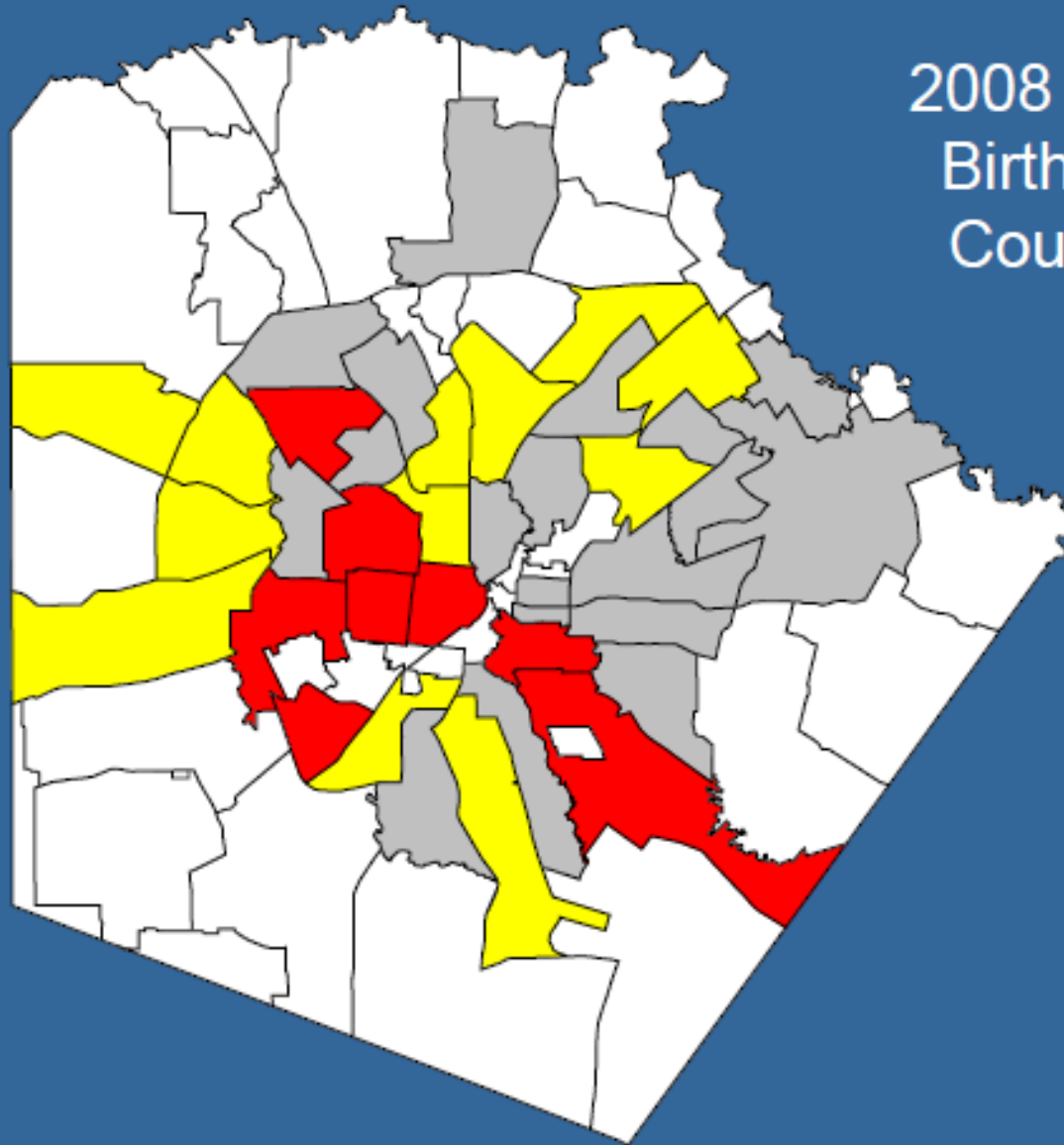
of Births



2008 Premature Births <37 Weeks Bexar County by zip code



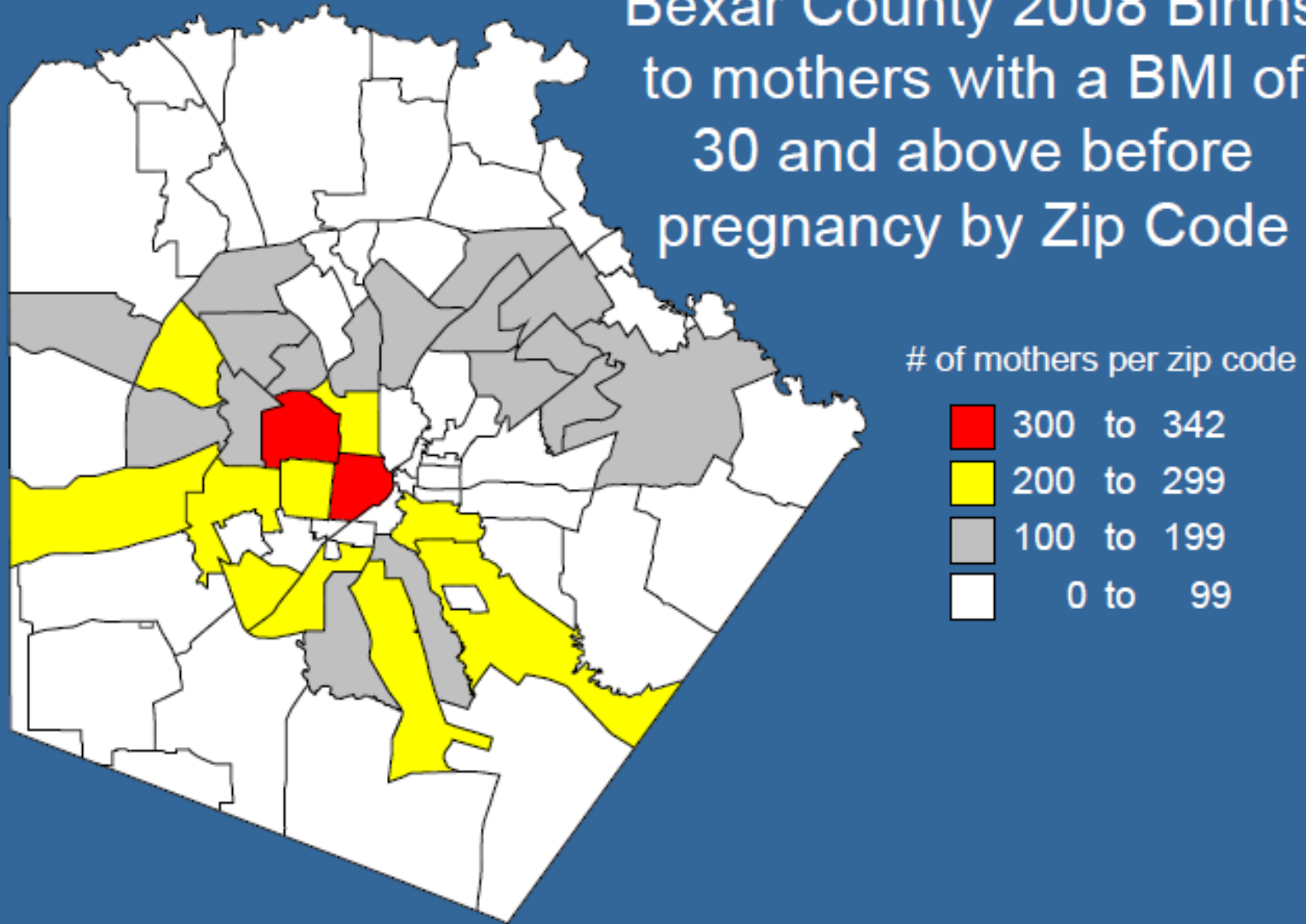
2008 Low Birth Weight Births <2500g Bexar County by Zip Code



Number of Births

Red	75 to 105
Yellow	50 to 74
Gray	25 to 49
White	0 to 24

Bexar County 2008 Births to mothers with a BMI of 30 and above before pregnancy by Zip Code



Ten Zip Codes - 2008

	Ten Zip Codes	% of Bexar County
Population	421,561	30%
Total Births	8,265	30.7%
Late Prenatal Care Births	2,627	36.6%
Birth within 24 Months of Previous	1,694	38.0%
Births To Mothers BMI >30	2,700	38.3%
Juvenile Probation	4,038	39.2%
Family Violence Reports	4,322	41.0%
Single Mother Births	5,154	41.2%
Medicaid Births	5,684	41.7%
Confirmed Child Abuse/Neglect Cases	2,460	43.8%
Births To Mothers Age <18	683	47.0%
Births to mothers < HS / GED	3,731	49.8%