

Solano County Data

Air pollution: Social Determinants & Health Impacts

AB 617 Community Health Protection Program Meeting Fairfield

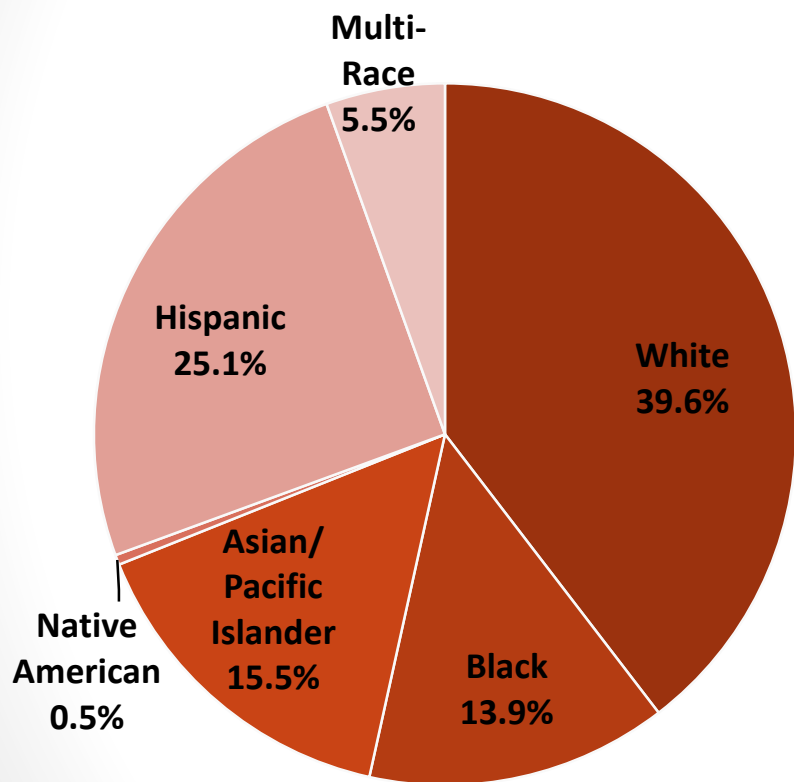
Presentation Overview

- Solano County Community Profile
- Social Determinants of Health
- Health Burdens
- Looking Ahead

Solano County Demographics

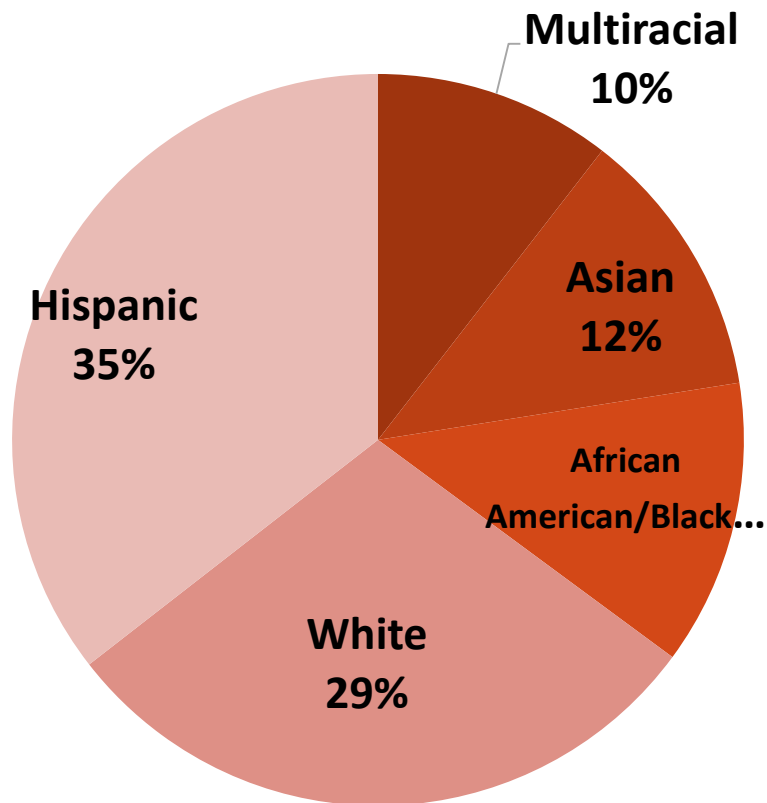
Race/Ethnicity

All Ages



Total Population: 440,207

0 – 18 years old



Solano County Demographics

Age and Gender

- **Median age:** 37 years
 - White, non-Hispanic: 46 years
 - Hispanic: 27 years
- **Children under 18 years:** 23% of population
- **Adults 65 years and older:** 13% of population

- **Gender**
 - 50% Male
 - 50% Female
- **Life Expectancy**
 - **2nd Lowest:**
(East Fairfield) : 77.45
 - **County:** 79.11 **State:** 80.50

Solano County Health Burdens

American Lung Association

Report Card

California: Solano

Solano County

San Jose-San Francisco-Oakland, CA

If you live in Solano County, the air you breathe needs your support.

Ozone



Particle Pollution 24-hour



Particle Pollution Annual

PASS

Solano gets a 'C' for air quality

TODD R. HANSEN
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FAIRFIELD — Solano County was given a "C" for its air quality, according to the State of the Air 2018 report released Wednesday.

The report is based on air quality monitoring data collected in 2014-2016, and does not include the historic wildfires of late 2017. The report focuses on ozone, which is smog, and particle pollution. They are the most widespread forms of air pollution that threaten public health.

The report is issued annually by the American Lung Association in California.

Solano's grade is based on an average of 1.3 unhealthy ozone days each year during the data collection period, and an average of 1.7 days of unhealthy particle totals. An average of 3.3 days would have resulted in a failing grade.

The report uses data tracked and approved by the U.S. Environmental Protection Agency. There are single monitors in Fairfield, Vacaville and Vallejo, the American Lung Association in California reported.

As a metro area, a 12-county San Francisco Bay Area ranked 13th for

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See Air, Page A9

American Lung Association; State of the Air, 2018

<http://www.lung.org/our-initiatives/healthy-air/sota/city-rankings/states/california/solano.html>

American Lung Association

Groups at Risk

Groups At Risk			
Total Population:	440,207	Risks to the population	
Pediatric Asthma:	7,632	Risks to people with Asthma	1.7%
Adult Asthma:	26,868	Risks to people with Asthma	6.1%
COPD:	15,692	Risks to people with COPD	3.5%
Lung Cancer:	187	Risks to people with lung cancer	
Cardiovascular Disease:	23,524	Risks to people with Cardiovascular Disease	
Diabetes:	36,132	Risks to people with Diabetes	
Children Under 18:	99,277	Risks to children and teens	
Adults 65 & Over:	64,554	Risks to older adults	
Poverty Estimate:	48,701	Risks to people with low incomes	

American Lung Association; State of the Air, 2018

<http://www.lung.org/our-initiatives/healthy-air/sota/city-rankings/states/california/solano.html>

Social Determinants of Health

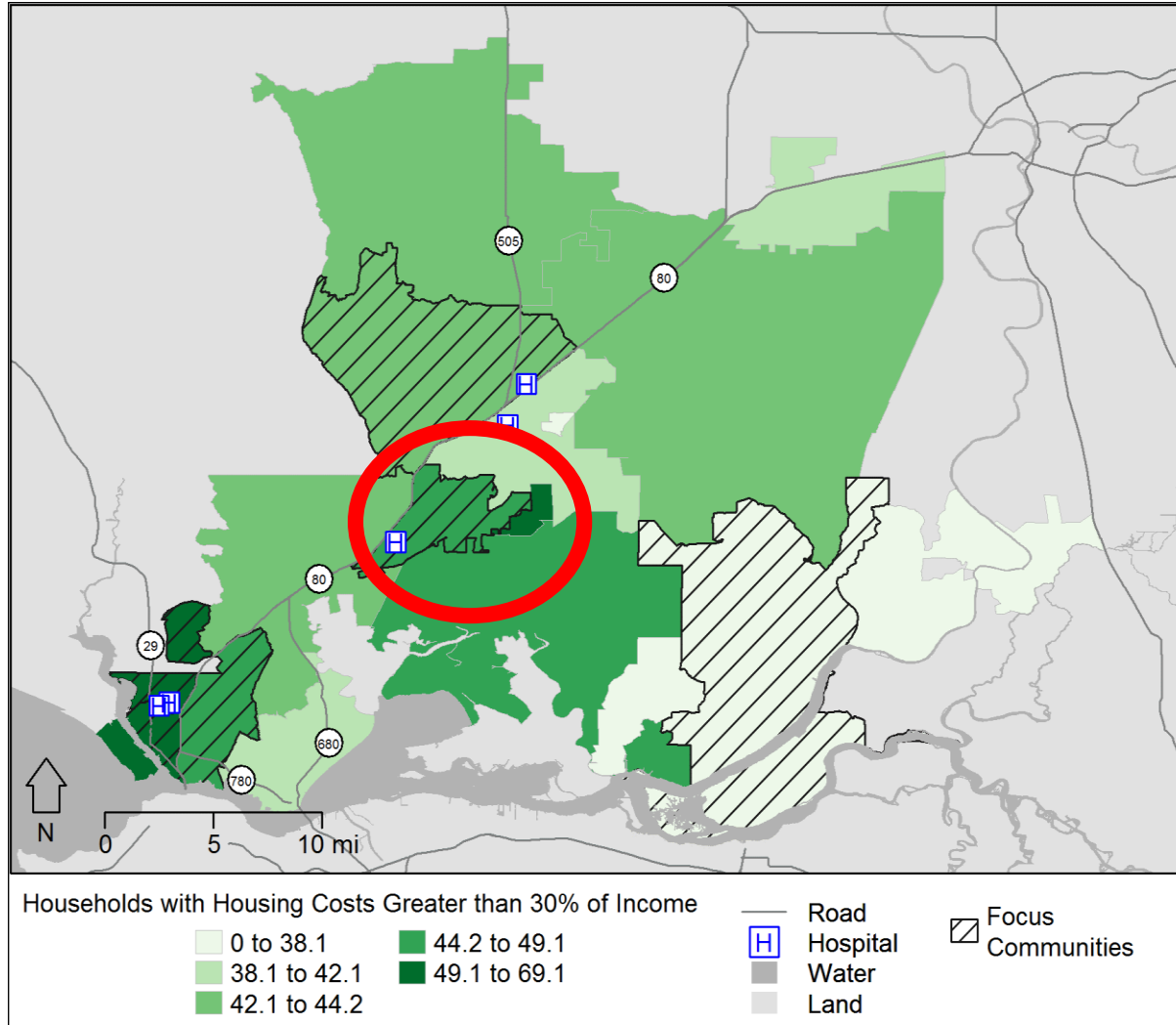
Housing Burden

ZIP Code	Percent Under 100% Federal Poverty Level	Percent Families with Children in Poverty	Percent Single Female Headed Households in Poverty	Percent Elderly in Poverty
West Fairfield 94534	5.4	6.2	23.6	0.8
East Fairfield 94533	17.9%	21.1	38.6	2.51
Travis AFB 94535	12.7	14	52.7	0
Solano County	13	15.4	34.2	1.8
State of CA	15.9	17.8	36.8	2.26

“There’s kind of like a cycle of poverty because there’s not a lot of resources, so people grow up and they don’t have the resources so they end up being poor again.”

Social Determinants of Health

Housing Burden



Social Determinants of Health

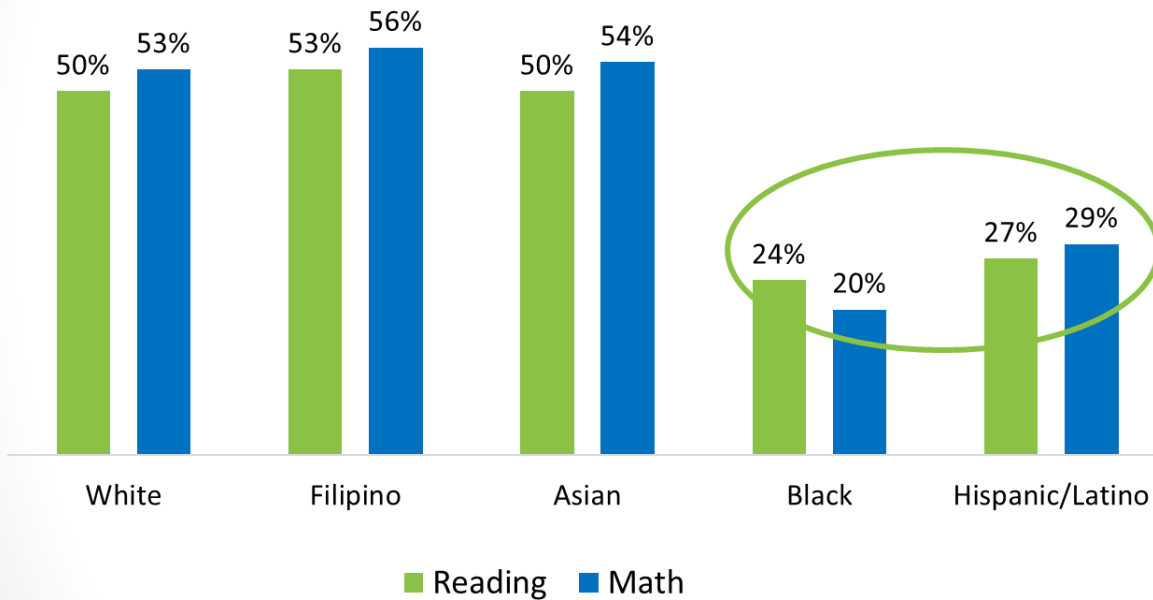
Employment

Zip Code	Percent Unemployed	Median Income
West Fairfield 94534	6.4%	\$92,676
East Fairfield 94533	13.2%	\$55,413
Travis AFB 94535	11.6%	\$50,970
Solano County	11%	\$67,177
CA State	9%	\$61,094

Social Determinants of Health

Education

Third Graders Advanced or Proficient in Reading and Math in Solano, by Race/Ethnicity 2015-16



Note: Number of 3rd graders tested—White: 1,193; Filipino: 359; Asian: 157; Black: 709; Hispanic/Latino: 1,930
Source: California Department of Education, DataQuest

88% Solano adults 25 years and older have a high school degree or higher

35% Solano adults 25 years and older have an associates degree or higher

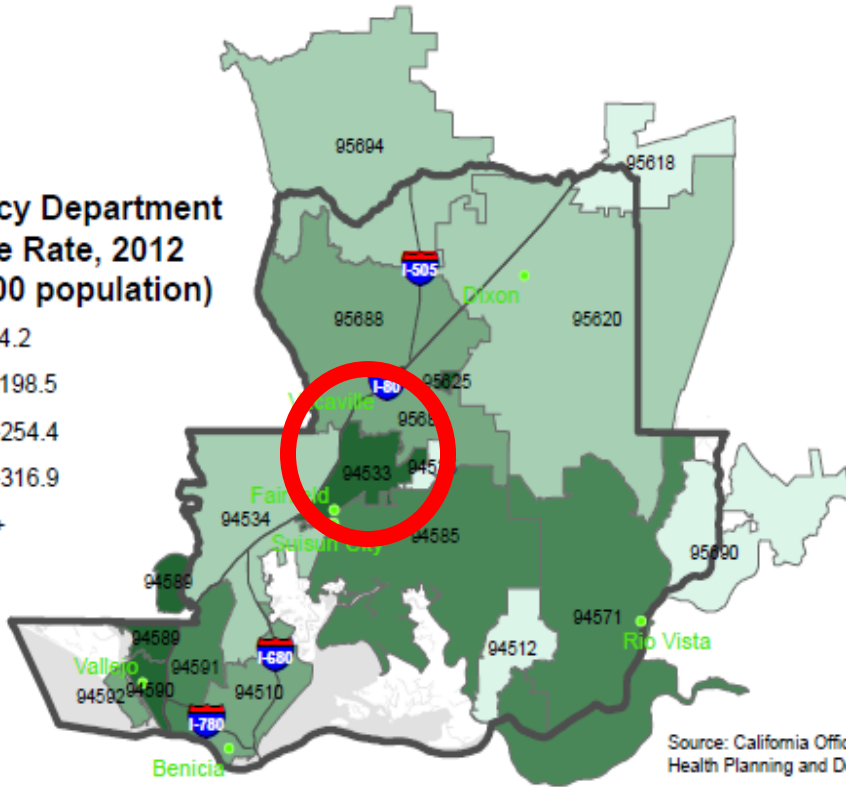
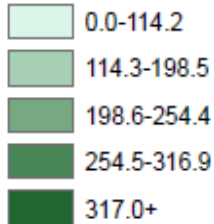
25% Solano adults 25 years and older have a Bachelor's degree or higher

Source: American Community Survey, 2011-2015; table B15003

Solano County Health Burdens

Asthma

Emergency Department Discharge Rate, 2012 (per 10,000 population)



Source: California Office of Statewide Health Planning and Development (OSHPD)

ED DISCHARGE RATE:

Solano County ED discharge rate for asthma is almost **1.9X** the California rate.

Ethnicity	ED Visits/10,000
White	271
Hispanic	181
Asian/Pacific Islander	148
Black	625
Solano County	276
CA	148

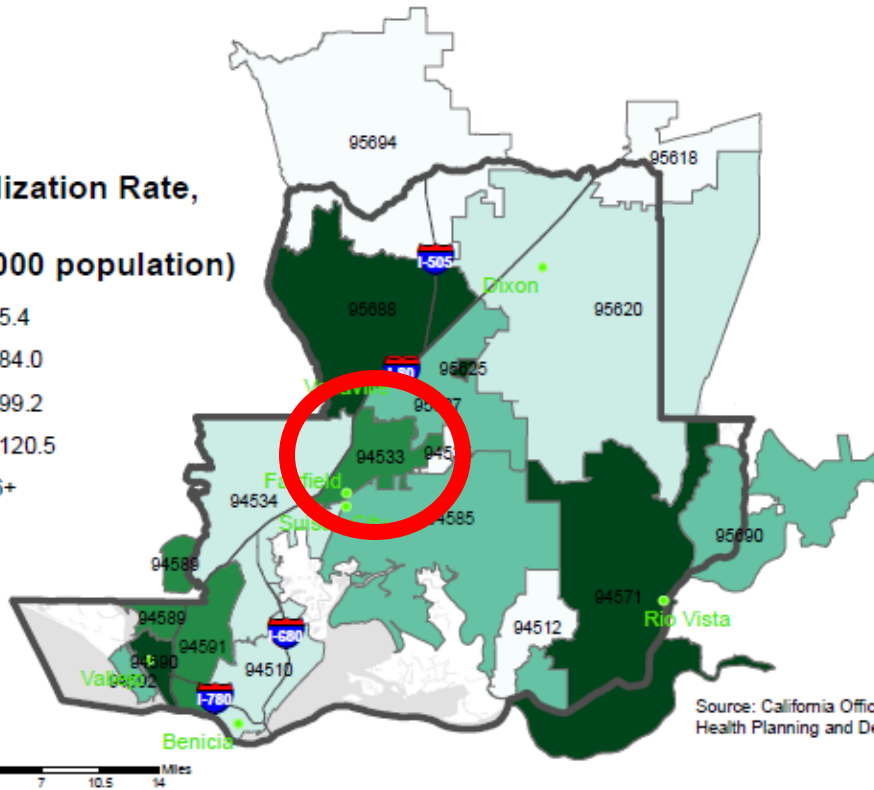
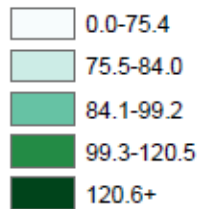
South/Central Vallejo Asthma ED Rate (470.83 per 10,000) is **more than triple** CA Rate

% Adults that had ever been told by a doctor that they have asthma is **double** CA rate

Solano County Health Burdens

Asthma

Hospitalization Rate,
2012
(per 10,000 population)



HOSPITALIZATION RATE:

Solano County hospitalization rate for asthma is almost **1.4X** the California rate.

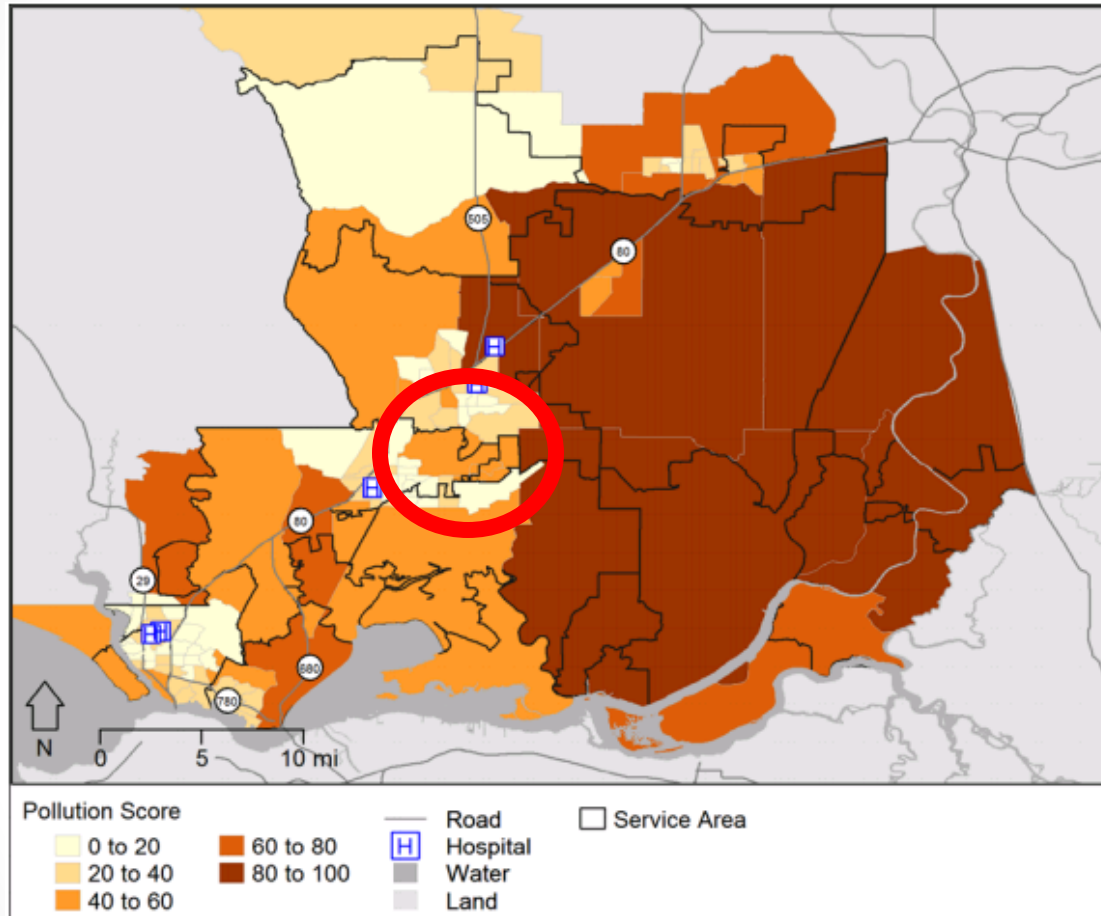
Ethnicity	Hospitalizations/10,000
White	123
Hispanic	57
Asian/Pacific Islander	77
Black	167
Solano County	102
CA	70.55

Source: California Office of Statewide Health Planning and Development (OSHPD)

Prepared by Solano County Public Health Epidemiology Unit, March 2016

Solano County Health Burdens

Pollution Burden



13 Pollution factors:

- Ozone
- [PM2.5]
- Diesel PM emissions
- Pesticide use
- Toxic releases
- Traffic density
- Drinking water
- Cleanup sites
- Impaired water bodies
- Groundwater threats
- Hazardous waste facilities & generators
- Solid waste sites & facilities.

Figure 23: Pollution burden score by census tracts in the HSA

Source: California Office of Environmental Health Hazard Assessment, 2014

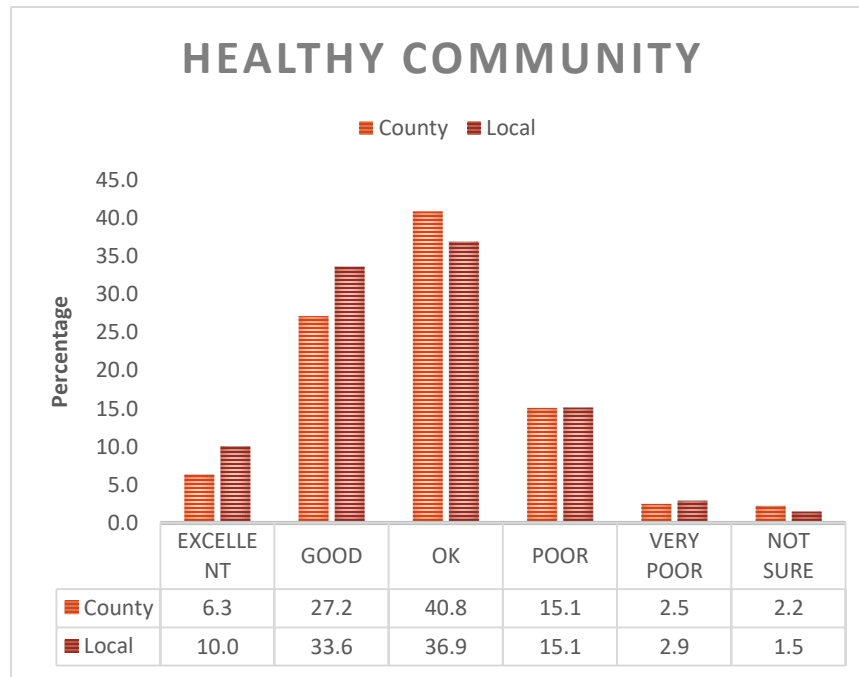
Solano County Health Burdens

Environmental Issues

1300 Residents Prioritization

Environmental	Percent
Cigarette smoke	40%
Poor housing conditions	34%
Air pollution	33%
Lack of access to healthy foods	27%
Trash on streets and sidewalks	23%
Lack of access to places for physical activity	18%
Lack of public transportation	17%
Lack of safe walkways and bikeways	17%
Poor neighborhood designs	15%
Heat/hot days	14%

Community Health Rating

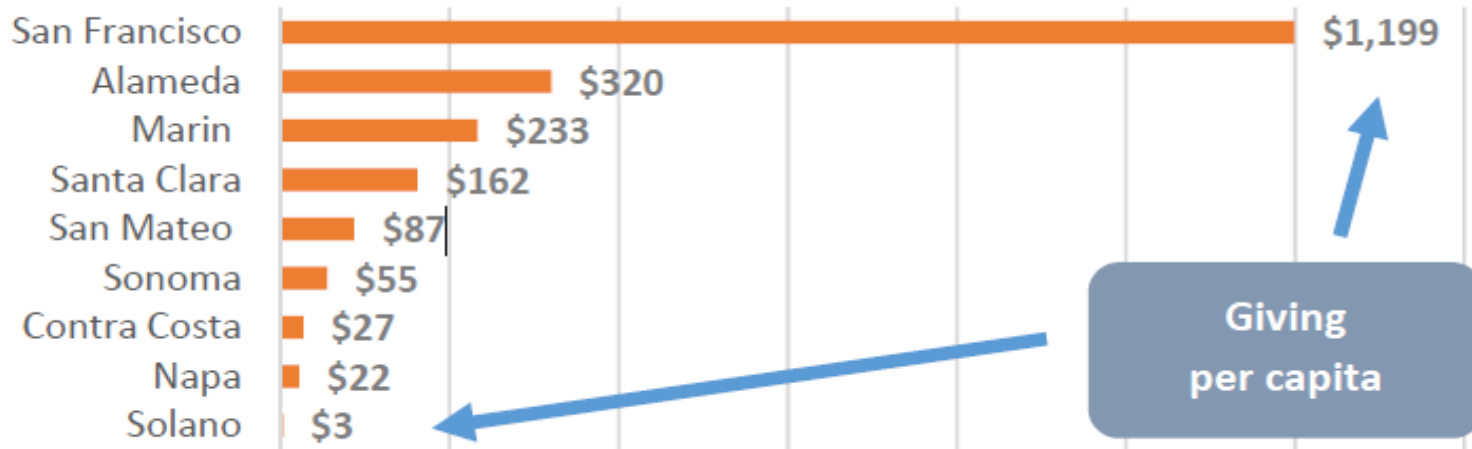


Solano County Health Burdens

Environmental Issues

Community Health Needs Assessment Category	Qualitative Themes
Pollution-Free Living and Work Environments	<ul style="list-style-type: none">• High density of freeways throughout Solano County• Pesticide used on agriculture crops<ul style="list-style-type: none">-Plane spraying crops with chemicals on a reoccurring basis• Dust and mold believed to be contributing to asthma• Asthma and allergies are major issues for area residents• Concerns with second hand smoke going through vents in section 8 housing impacting adults and kits
Affordable and accessible transportation	<ul style="list-style-type: none">• Many residents lack adequate reliable and affordable transportation• Lack of transportation effects ability to get to grocery stores, health care services and jobs• Residents have to travel far to get comprehensive care services• Bus system is inconsistent and not running often enough• Transportation is least common in low SES communities• County residents have to travel far for work• Public transportation is expensive for daily usage

Looking Ahead for Solano County Opportunities



- Economy
- Transportation
- Agriculture
- Industry

Resources

- <http://www.solanocounty.com/depts/ph>
- Solano County Community Health Assessment 2016
- Solano County Community Health Improvement Plan

Questions?



Thank you!



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