



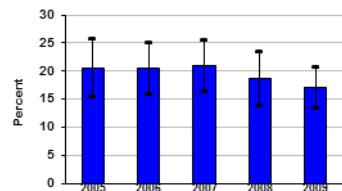
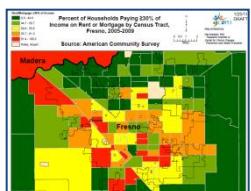
# Healthy Community Indicators

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Presented to

Data Committee  
Public Health Alliance of Southern California  
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# Background

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- Chronic disease and injury are leading cause of death and disability in California
- Major risk factors for obesity, chronic illness, and injury include poor nutrition, sedentary lifestyles, smoking, and alcohol use.
- These risk behaviors are profoundly influenced by people's social, physical, and economic environments.
- Inequities in health outcomes mirror inequities in community environments





# Health Community Data and Indicators Project: Goals and Project Description

- Enhance public health by providing data, a standardized set of statistical measures, and tools that a broad array of sectors can use for planning healthy communities and evaluating the impact of plans, projects, policy, and environmental changes on community health
- 2-year project (2012/13) funded by Strategic Growth Council



- Partnership with UCSF



# Why are Healthy Community Indicators Important?

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- Data demands by local, regional, county, state stakeholders for information about community environments that impacts the health of their communities
- Statewide standard to avoid duplication of effort and to facilitate comparison
- Health Focus
  - Connects the dialogue about health with land use and planning processes in jurisdictions (local, county, regional, state)
  - Identify opportunities for significant health co-benefits or unintentional harms from changes in the built environment
- Health and Social Equity
  - Health status is not the same within and between communities and varies by neighborhood, race/ethnicity, income level, and other factors
  - Need for usable data at finer geographical and sub-group levels
- Help meet SGC's goals to promote public health, including through SGC grant programs and sustainable community strategies



# Objectives

- Identify a standardized, core set of valid indicators that define a healthy community
- Identify methods to construct indicators at different geographic scales (e.g. census tract, zip code, city, county, etc.)
- Disseminate technical documentation that allows local, county, regional, and state stakeholders to produce indicators
- Develop a multi-agency plan for centralized data collection, analysis, and reporting of indicators, and
- Create a demonstration website that stakeholders and CDPH can use to pilot test selected healthy community indicators.

# SGC's Health in All Policies Task Force



**Table 1. Healthy Communities Framework – What is a Healthy Community?**

A Healthy Community provides for the following through all stages of life:

► **Meets basic needs of all**

- Safe, sustainable, accessible and affordable transportation options
- Affordable, accessible and nutritious foods and safe drinkable water
- Affordable, high quality, socially integrated and location-efficient housing
- Affordable, accessible and high quality health care
- Complete and livable communities including quality schools, parks and recreational facilities, child care, libraries, financial services and other daily needs
- Access to affordable and safe opportunities for physical activity
- Able to adapt to changing environments, resilient, and prepared for emergencies
- Opportunities for engagement with arts, music and culture

► **Quality and sustainability of environment**

- Clean air, soil and water, and environments free of excessive noise
- Tobacco- and smoke-free
- Green and open spaces, including healthy tree canopy and agricultural lands
- Minimized toxics, greenhouse gas emissions and waste
- Affordable and sustainable energy use
- Aesthetically pleasing

► **Adequate levels of economic, social development**

- Living wage, safe and healthy job opportunities for all, and a thriving economy
- Support for healthy development of children and adolescents
- Opportunities for high quality and accessible education

► **Health and social equity**

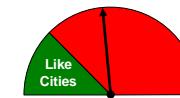
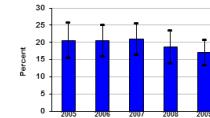
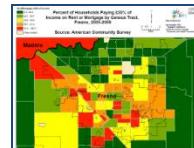
► **Social relationships that are supportive and respectful**

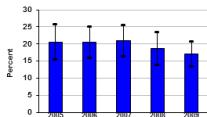
- Robust social and civic engagement
- Socially cohesive and supportive relationships, families, homes and neighborhoods
- Safe communities, free of crime and violence



# Project Update

- Preliminary, Draft Core Indicators
  - Criteria of validity, statistical reliability, timeliness, utility, already used by state agencies
- Bibliographic Review of Indicators and Evidence
- Meta-database for Indicators
- Analysis
- Local/regional projects with ~6 pilot indicators





## Draft Core List of Indicators

- 56 indicators
  - Meets basic needs of all: 24
  - Quality and sustainability of environment: 15
  - Adequate levels of economic social development: 9
  - Health and social equity: 3 indices (see below)
  - Social relationships that are supportive and respectful: 5
- Core list at CDPH website:  
(<http://www.cdph.ca.gov/programs/Pages/OHEMain.aspx>, Policy Unit links)

# Meeting Basic Needs (Food and Transportation)

Aspirational Goal/Domain	Indicators
Safe, sustainable, accessible and affordable transportation options	<ul style="list-style-type: none"><li>• Number and rate of collisions by severity and mode of transport (e.g. pedestrian-car collisions per vehicle mile or mile walked)</li><li>• Miles traveled per capita by mode (car, public transit, walk/bike)</li><li>• Percent of residents mode of transportation to work</li><li>• Percent of population located <math>&lt;\frac{1}{2}</math> mile of a regional bus/rail/ferry &amp; <math>&lt;\frac{1}{4}</math> mile local bus/light rail</li><li>• Percent of household income spent on travel</li><li>• Percent of population aged 16 years or older by time walking and biking to work (e.g. <math>\geq 10</math> minutes/day)</li></ul>
Affordable, accessible and nutritious foods	<ul style="list-style-type: none"><li>• Average weekly cost of a market basket for food items relative to income</li><li>• Percent of households within <math>\frac{1}{2}</math> mile of a full-service grocery store, fresh produce market, or store with fresh produce</li><li>• Percent of adults who consume <math>\geq 5</math> servings of fruits &amp; vegetables a day</li><li>• Retail food environment index</li></ul>
Affordable, high quality, socially integrated and location-efficient housing	<ul style="list-style-type: none"><li>• Neighborhood Completeness Index (<math>&lt;\frac{1}{2}</math> mile radius for 8 out of 11 common public services and 9 of 12 common retail services)</li><li>• Housing to jobs ratio</li><li>• Jobs:housing match (e.g., Percent of adult working population who could find a job that matches their general occupational qualifications within a specified travel radius of their residence)</li></ul>

# Quality and sustainability of environment

Aspirational Goal/Domain	Indicators
Clean air, soil and water, and environments free of excessive noise	<ul style="list-style-type: none"><li>• Number of days per year geographic area exceeds ambient air standards for criteria pollutants (ozone and PM2.5)</li><li>• Percent of households/population near busy roadways</li><li>• Average daily water use per capita</li><li>• Drinking water quality (population served by water systems meeting regulations of the Safe Drinking Water Act)</li><li>• Average daytime and night time noise outdoor noise levels</li></ul>
Tobacco and smoke free	<ul style="list-style-type: none"><li>• Prevalence of smoking in adults and youth</li></ul>
Green and open spaces, including agricultural lands	<ul style="list-style-type: none"><li>• Percent of residents within ½ mile of park, beach, open space</li><li>• Acres of parkland per 1,000 residents</li><li>• Acres of cropland converted to developed land</li><li>• Tree canopy coverage (urban areas)</li></ul>
Minimized toxics, GHG emissions and waste	<ul style="list-style-type: none"><li>• Pounds of toxic chemicals generated by reporting facility per capital/geographic area</li><li>• Reported pesticide use</li><li>• Annual per capita GHG emission</li><li>• Total waste diversion (per capita disposal rate)</li></ul>
Affordable and sustainable energy use	<ul style="list-style-type: none"><li>• Energy costs relative to household income</li><li>• Percent of electricity from renewable sources</li></ul>



# Equity and Indicators

- Definition
  - Inequities are differences in indicator values that are avoidable, unfair, preventable, and rooted in social position such as race/ethnicity, social/economic class, educational attainment, occupation, place (urban/rural), tribal status, gender, sexual orientation, or other social disadvantage (N Krieger)
- Combining two approaches:
  - Equity within individual indicators (race/ethn., place)
  - Equity as its own domain using indices for:
    - ✓ Race/ethnicity equity
    - ✓ Income equity (Gini Index scaled 0 to 1)
    - ✓ Place-based equity



# Work in Progress

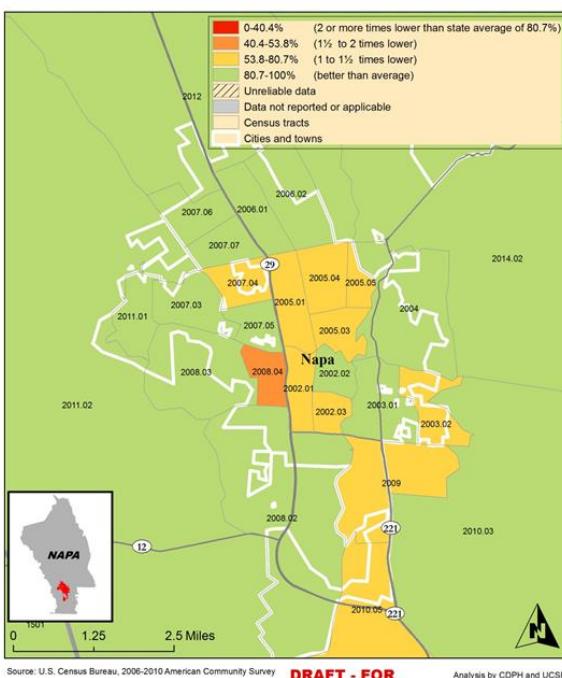
- Evidence database linking indicator and/or aspiration goal to health outcomes
- Meta-database (future web content and documentation)
  - Significance
  - Evidence
  - Meta-data and Methods
- Data Model
- Bay Area Pilot to Define User Requirements
  - Bay Area Health Departments (BARHII)
  - ABAG and Local Elected Official
- Statistical Analysis
- Data Products

## ~~Bay Area Learning Network Indicators Under Development~~

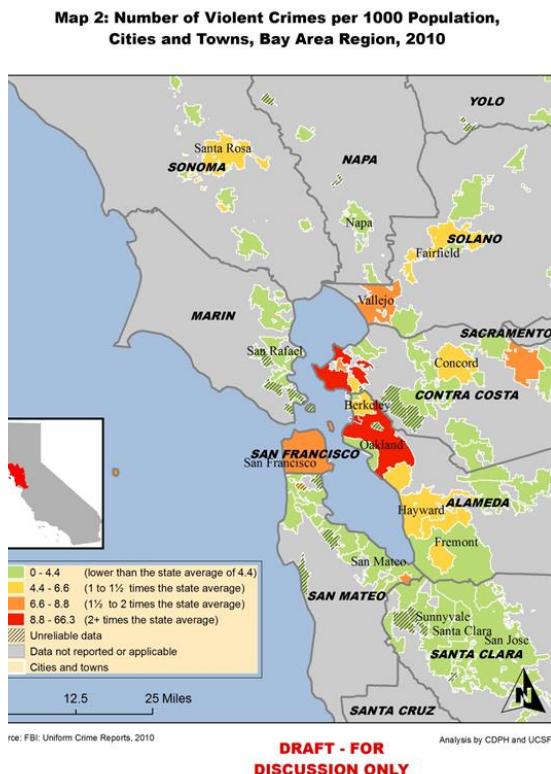
- Percent of households within 1/2 mile of regional bus/rail/ferry
  - Average weekly cost of a market basket of food items relative to income
  - Gini Coefficient of Income Inequality
  - Number of unhealthy days for ozone
  - Number of unhealthy days for ozone
  - Percent of residents within 1/2 mile of park, beach, open space
  - Reported rate of crime by type
  - Educational attainment of population aged 25 years and older
-

# Examples of Maps, Charts, Tables

## Census Tract



## City/Town

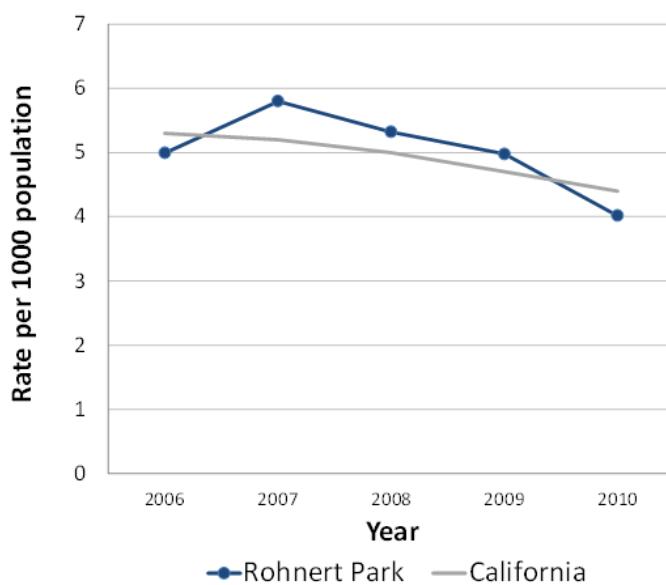


## County



# Times Series and Race/Ethnicity Variation

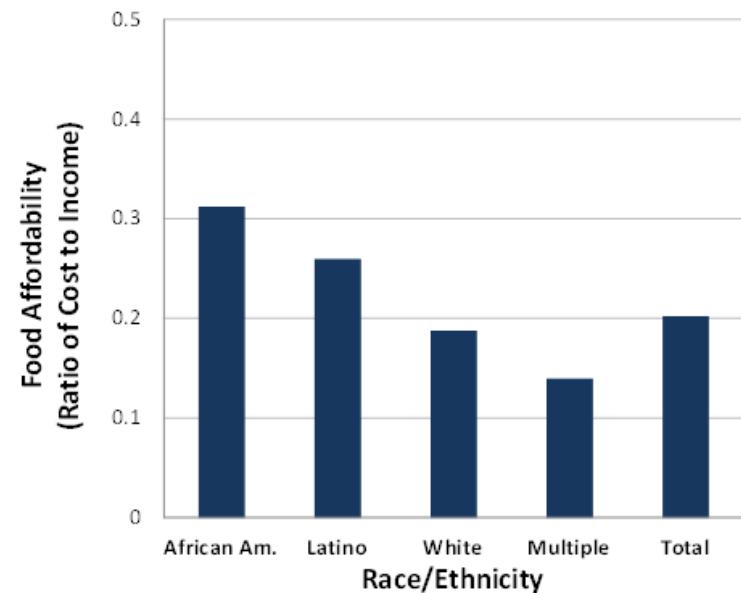
Figure 2. Number of Violent\* Crimes per 1000 population, Rohnert Park, CA, 2006-2010



Data Source: FBI: Uniform Crime Reports, 2006-2010

\* Violent crime includes murder and non-negligent manslaughter, forcible rape, robbery, aggravated assault

Figure 2. Average Cost of a Market Basket of Nutritious Food Items Relative to Income for a Female-Headed Household with Children Under 18 Years of Age by Race/Ethnicity, Napa County , 2006-2010



Data Source: USDA Low Cost Meals Eaten at Home, American Community Survey, 2006-2010

Note: Asian, Native Hawaiian and Other Pacific Islander, American Indian/Alaska Native, Other Race did not have statistically reliable data and are not presented

# Tables

**Table 1. Distribution of Household Income Relative to the Number of Households, Expressed on a 0 to 1 Scale (Gini Index), by City/Town, San Mateo County, 2006-2010**

City/Town	Gini Index	
Woodside	0.56	Higher Inequality
Portola Valley	0.56	
West Menlo Park	0.54	
Atherton	0.53	
Menlo Park	0.51	
Hillsborough	0.50	
Burlingame	0.48	
<b>California</b>	<b>0.47</b>	
Redwood City	0.46	
North Fair Oaks	0.45	
Half Moon Bay	0.45	
San Mateo	0.44	
East Palo Alto	0.44	
Millbrae	0.43	
Brisbane	0.43	
Broadmoor	0.43	
San Carlos	0.43	
Belmont	0.42	
Moss Beach	0.41	
Highlands-Baywood Park	0.41	
Emerald Lake Hills	0.41	
El Granada	0.40	
Ladera	0.40	
South San Francisco	0.39	
Pacifica	0.39	
Foster City	0.39	
Pescadero	0.38	
San Bruno	0.38	
Daly City	0.37	
La Honda	0.37	
Montara	0.33	
Colma	0.31	
Loma Mar	0.06*	Lower Inequality

Data Source: U.S. Census Bureau, American Community Survey (2006-2010)

\* Not statistically reliable (Relative Standard Error > 30%)

**Table 1. Annual Mean Ambient Concentration of Fine Particulate Matter (PM<sub>2.5</sub>) by Zip Code in Sonoma County, 2007-2009**

Zip Code	City	Pop.	PM <sub>2.5</sub> Concentration µg/m <sup>3</sup>
94923	Bodega Bay	1,077	6.18
94922	Bodega	200	6.33
95421	Cazadero	354	5.91
95425	Cloverdale city	8,618	5.65
94931	Cotati city	7,200	7.11
95442	Eldridge	874	7.85
95436	Forestville	3,293	6.46
95439	Fulton	507	6.88
95441	Geyserville	858	6.05
95444	Graton	748	6.61
95446	Guerneville	4,012	6.23
95471	Guerneville	522	6.30
95448	Healdsburg	11,254	6.33
95452	Kenwood	984	7.70
95462	Monte Rio	1,090	6.23
95486	Monte Rio	62	6.23
95465	Occidental	575	6.24
94951	Penngrove	2,486	7.39
94952	Petaluma	21,968	6.84
94954	Petaluma	35,973	7.80
94928	Rohnert Park	40,957	7.21
95401	Santa Rosa	32,198	6.88
95403	Santa Rosa	34,232	6.94
95404	Santa Rosa	32,165	7.32
95405	Santa Rosa	21,397	7.33
95407	Santa Rosa	22,319	7.06
95409	Santa Rosa	25,504	7.47
95497	Sea Ranch	1,305	NA
95472	Sebastopol	7,379	6.62
95476	Sonoma	10,648	8.25
95450	Timber Cove	143	6.04
95492	Windsor	26,456	6.69

\* Not available

Source: California Air Resources Board

Note: California standard for PM<sub>2.5</sub> is an annual average of 12 µg/m<sup>3</sup>

# Data Files

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q			
1	ind_definition	reportyear	race	race_eth	geotype	geotypevalue	geoname	county_name	county_fi	numerator	denominator	rate	1000	LL	95CI	UL	95CI	se	rse	version
2	Number of violent crimes per 1,000	2006	9	Total	PL	00562	Alameda city	Alameda	06001	221	71212	3.10	2.69	3.51	0.21	6.73	11/16/2012			
3	Number of violent crimes per 1,000	2006	9	Total	PL	00674	Albany city	Alameda	06001	54	16138	3.35	2.45	4.24	0.46	13.61	11/16/2012			
4	Number of violent crimes per 1,000	2006	9	Total	PL	06000	Berkeley city	Alameda	06001	646	101651	6.36	5.87	6.85	0.25	3.93	11/16/2012			
5	Number of violent crimes per 1,000	2006	9	Total	PL	20018	Dublin city	Alameda	06001	85	39682	2.14	1.69	2.60	0.23	10.85	11/16/2012			
6	Number of violent crimes per 1,000	2006	9	Total	PL	22594	Emeryville city	Alameda	06001	125	8605	14.53	11.98	17.07	1.30	8.94	11/16/2012			
7	Number of violent crimes per 1,000	2006	9	Total	PL	26000	Fremont city	Alameda	06001	569	202273	2.81	2.58	3.04	0.12	4.19	11/16/2012			
8	Number of violent crimes per 1,000	2006	9	Total	PL	33000	Hayward city	Alameda	06001	776	141556	5.48	5.10	5.87	0.20	3.59	11/16/2012			
9	Number of violent crimes per 1,000	2006	9	Total	PL	41992	Livermore city	Alameda	06001	147	79115	1.86	1.56	2.16	0.15	8.25	11/16/2012			
10	Number of violent crimes per 1,000	2006	9	Total	PL	50916	Newark city	Alameda	06001	211	42334	4.98	4.31	5.66	0.34	6.88	11/16/2012			
11	Number of violent crimes per 1,000	2006	9	Total	PL	53000	Oakland city	Alameda	06001	7599	398834	19.05	18.62	19.48	0.22	1.15	11/16/2012			
12	Number of violent crimes per 1,000	2006	9	Total	PL	56938	Piedmont city	Alameda	06001	19	10654	1.78	0.98	2.59	0.41	22.94	11/16/2012			
13	Number of violent crimes per 1,000	2006	9	Total	PL	57792	Pleasanton city	Alameda	06001	68	66544	1.02	0.78	1.26	0.12	12.13	11/16/2012			
14	Number of violent crimes per 1,000	2006	9	Total	PL	68084	San Leandro city	Alameda	06001	650	78882	8.24	7.61	8.87	0.32	3.92	11/16/2012			
15	Number of violent crimes per 1,000	2006	9	Total	PL	81204	Union City city	Alameda	06001	444	69799	6.36	5.77	6.95	0.30	4.75	11/16/2012			
16	Number of violent crimes per 1,000	2006	9	Total	PL	02252	Antioch city	Contra Costa	06013	657	101537	6.47	5.98	6.97	0.25	3.90	11/16/2012			
17	Number of violent crimes per 1,000	2006	9	Total	PL	08142	Brentwood city	Contra Costa	06013	123	44188	2.78	2.29	3.28	0.25	9.02	11/16/2012			
18	Number of violent crimes per 1,000	2006	9	Total	PL	13882	Clayton city	Contra Costa	06013	12	11242	1.07	0.46	1.67	0.31	28.87	11/16/2012			
19	Number of violent crimes per 1,000	2006	9	Total	PL	16000	Concord city	Contra Costa	06013	520	124362	4.18	3.82	4.54	0.18	4.39	11/16/2012			
20	Number of violent crimes per 1,000	2006	9	Total	PL	17988	Danville town	Contra Costa	06013	33	42229	0.78	0.51	1.05	0.14	17.41	11/16/2012			
21	Number of violent crimes per 1,000	2006	9	Total	PL	21796	El Cerrito city	Contra Costa	06013	193	23074	8.36	7.18	9.54	0.60	7.20	11/16/2012			
22	Number of violent crimes per 1,000	2006	9	Total	PL	33308	Hercules city	Contra Costa	06013	42	24326	1.73	1.20	2.25	0.27	15.43	11/16/2012			
23	Number of violent crimes per 1,000	2006	9	Total	PL	38086	Kensington CDP	Contra Costa	06013	5	5313	0.94	0.12	1.77	0.42	44.72	11/16/2012			
24	Number of violent crimes per 1,000	2006	9	Total	PL	39122	Lafayette city	Contra Costa	06013	22	24990	0.88	0.51	1.25	0.19	21.32	11/16/2012			
25	Number of violent crimes per 1,000	2006	9	Total	PL	46114	Martinez city	Contra Costa	06013	98	36239	2.70	2.17	3.24	0.27	10.10	11/16/2012			
26	Number of violent crimes per 1,000	2006	9	Total	PL	49187	Moraga town	Contra Costa	06013	15	17021	0.88	0.44	1.33	0.23	25.82	11/16/2012			
27	Number of violent crimes per 1,000	2006	9	Total	PL	53070	Oakley city	Contra Costa	06013	95	27422	3.46	2.77	4.16	0.36	10.26	11/16/2012			
28	Number of violent crimes per 1,000	2006	9	Total	PL	54232	Orinda city	Contra Costa	06013	11	18423	0.60	0.24	0.95	0.18	30.15	11/16/2012			
29	Number of violent crimes per 1,000	2006	9	Total	PL	57288	Pinole city	Contra Costa	06013	129	19233	6.71	5.55	7.86	0.59	8.80	11/16/2012			
30	Number of violent crimes per 1,000	2006	9	Total	PL	57456	Pittsburg city	Contra Costa	06013	218	63110	3.45	3.00	3.91	0.23	6.77	11/16/2012			
31	Number of violent crimes per 1,000	2006	9	Total	PL	57764	Pleasant Hill city	Contra Costa	06013	136	33452	4.07	3.38	4.75	0.35	8.57	11/16/2012			
32	Number of violent crimes per 1,000	2006	9	Total	PL	60620	Richmond city	Contra Costa	06013	1224	103106	11.87	11.21	12.54	0.34	2.86	11/16/2012			
33	Number of violent crimes per 1,000	2006	9	Total	PL	68294	San Pablo city	Contra Costa	06013	397	31283	12.69	11.44	13.94	0.64	5.02	11/16/2012			
34	Number of violent crimes per 1,000	2006	9	Total	PL	68378	San Ramon city	Contra Costa	06013	64	50449	1.27	0.96	1.58	0.16	12.50	11/16/2012			
35	Number of violent crimes per 1,000	2006	9	Total	PL	83346	Walnut Creek city	Contra Costa	06013	113	64774	1.74	1.42	2.07	0.16	9.41	11/16/2012			
36	Number of violent crimes per 1,000	2006	9	Total	PL	05164	Belvedere city	Marin	06041	1	2091	0.48	0.00	1.42	0.48	100.00	11/16/2012			
37	Number of violent crimes per 1,000	2006	9	Total	PL	23168	Fairfax town	Marin	06041	9	7170	1.26	0.44	2.08	0.42	33.33	11/16/2012			
38	Number of violent crimes per 1,000	2006	9	Total	PL	47710	Mill Valley city	Marin	06041	13	13406	0.97	0.44	1.50	0.27	27.74	11/16/2012			
39	Number of violent crimes per 1,000	2006	9	Total	PL	52582	Novato city	Marin	06041	139	50788	2.74	2.28	3.19	0.23	8.48	11/16/2012			
40	Number of violent crimes per 1,000	2006	9	Total	PL	62980	Ross	Marin	06041	0	2304	0.00	0.00					11/16/2012		
41	Number of violent crimes per 1,000	2006	9	Total	PL	64434	San Anselmo town	Marin	06041	21	12126	1.73	0.99	2.47	0.38	21.82	11/16/2012			



# Next Steps

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- Share with stakeholders to get feedback
- Continue building out indicators with regional pilots of users at the local, county, regional, and state levels
- Continue coordination with other statewide indicator projects (Regional Progress Report, MPO Statewide Project, OPR workgroup)
- Develop plan for central data repository/web site

## Contact Information

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