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5	An Analysis of Health Equity in the San Joaquin Valley Region
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An Analysis of Health Equity in the San Joaquin Valley Region

Abstract:

This report provides an analysis of health equity in California's North San Joaquin Valley region compared to other regions of the state. The analysis focuses on 58 counties in the 13 regions and examines 107 indicators related to health outcomes and social determinants of health. The data shows that on most indicators, the San Joaquin Valley fares worse than other parts of California, often by a significant margin. Key findings include lower rates of educational attainment, higher poverty levels, greater exposure to environmental pollution, reduced access to healthcare, and poorer health outcomes related to chronic disease, maternal-child health, mental health, and more. These disparities point to deep-rooted inequities in social determinants of health that contribute to gaps in wellbeing. The report provides a basis for understanding regional health needs and priorities for investment and intervention to advance health equity in the Valley. Recommendations focus on economic development, healthcare access, and education. While limited by use of county-level pre-pandemic data, the report offers valuable insights into persistent disparities to inform policy and action.

Keywords:

37 Health Index, NSJV counties, Regional Health Determinants

401. Introduction / Background

The San Joaquin Valley 41 **Landscape:** California's San Joaquin Valley (the Valley) is the southern part of what's known as 42 the Central Valley and is primarily rural, although it contains multiple urban centers. This report 43 includes information on twelve of the region's counties: Calaveras, Fresno, Kern, Kings, 44 Madera, Mariposa, Merced, San Benito, San Joaquin, Stanislaus, Tulare, and Tuolumne. 45 46 **Challenges:** The Valley is known for its extremely hot, dry summers and densely foggy winters. 47 The area has long experienced a severe drought and is experiencing the effects of the climate 48 49 crisis in multiple ways, including record wildfires and low groundwater levels due to increased water extraction for agricultural production (the region's primary industry). One of the most 50 polluted regions in both the state and the nation, the Valley experiences high levels of toxic 51 contamination in its air, water, and land. 52 Other challenges for residents of the San Joaquin Valley include low educational attainment8, 53 widespread poverty, a swiftly growing and exceptionally diverse population, significant health 54 needs, and limited public health and healthcare resources. Large portions of the landscape are 55 rural, creating significant challenges related to access to resources that support health, prosperity, 56 57 social connectedness, and longevity.

Assets and Strengths: Some of the Valley's most prominent challenges are also its greatest

59 assets, however. The diversity,

commitment, ingenuity, and

resiliency of the region's people have

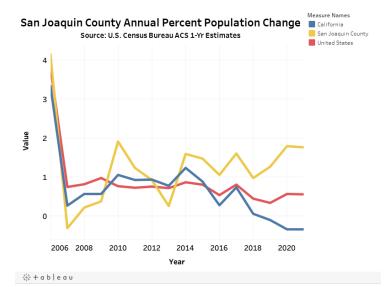
carried them through decades of

hardship and adversity and make the

Valley a unique and valuable place to

live for many. As such, the region is

one of the fastest growing in the state,



with a 2019 total population of over 4 million and a projected population of almost 6.5 million

68 by 2060.

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Economic Contribution: The San Joaquin Valley's economic contribution to both the nation and the state is significant; its largest contributions come through its agricultural and energy production. According to California's Department of Food and Agriculture, eight of the state's top ten agriculture producing counties in 2019 were Valley counties. In the same year, the twelve Valley counties highlighted in this report (just 21% of California's 58 counties) produced 60% of the state's income from agriculture. The Valley produced \$37 billion in agricultural products in 2019- more than twice the rest of the state and more than the state of Iowa, the next highest producer in the country. If it were its own state, the region would be the top agricultural producing state in the nation.

In addition, several of the largest oil fields in the country exist in the region; the San Joaquin

basin in Kern County is the most prolific oil-producing area in California.

812. Literature Review

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In our research project, we have extensively delved into key sources that have significantly shaped our approach. Among these sources, "CalEnviroScreen 4.0" and "An Analysis of Health Equity in the San Joaquin Valley Region" have played pivotal roles in guiding our work. Although we have not conducted a precise tally of the multitude of papers and sources we have reviewed, cited, or included in our literature table, these two references have served as the cornerstones of our project. "CalEnviroScreen 4.0" has provided invaluable insights into the uneven distribution of environmental impacts, shedding light on the disproportionate burden of pollution borne by certain communities. On the other hand, "An Analysis of Health Equity in the San Joaquin Valley Region" has acted as our guiding compass, revealing the intricate interplay of health disparities and the social determinants of health within the region. These sources have not only influenced the objectives of our project but have also honed our methodologies. They have consistently reminded us of the paramount importance of addressing the root causes of health inequities and the imperative of considering social determinants of health. While we may not have quantified the exact number of papers in our review, what remains indisputable is that we have meticulously utilized reputable research to construct a robust foundation for our project. Our journey is characterized by a commitment to being wellinformed, data-driven, and deeply dedicated to the noble mission of advancing health equity in the North San Joaquin Valley.

3. Data / Problem Analytics 103 104 3.1 *Data* Identification of areas of high need for the region were identified through this analysis of 105 Healthy Places Index (HPI) data, however, and these informed the final selection of indicators 106 included in the analysis. 107 108 Data for each county in California was then downloaded from the following websites: PLACES: Local Data for Better Health 109• 110• County Health Rankings and Roadmaps KidsData 111• 112• County Health Status Profiles CalEnviroscreen 4.0 113• 114 3.2 Methods 115 116 **<u>Data Collection:</u>** Our data collection process has been marked by meticulousness. We have 117 sourced our data from reputable and highly regarded outlets, including the CDC's "PLACES: 118 Local Data for Better Health," "County Health Rankings and Roadmaps," "KidsData," and others. Our primary aim has been to ensure not only the abundance but also the reliability of the 119 data we employ. 120 121 122 **Data Cleaning:** The data cleaning phase is akin to tidying a room before commencing a project. 123 We have actively engaged in data cleaning by thoroughly reviewing our datasets in software like

Excel. During this process, we have addressed missing information, resolved inconsistencies, and painstakingly organized the data to ensure its reliability and freedom from errors.

Variable Construction: The creation of variables has been instrumental in building the foundation for our analysis. We have defined and developed meaningful variables derived from raw data, aligning them closely with our research objectives. Each variable serves as a crucial puzzle piece contributing to the larger research landscape.

Regional Groupings: Filters were
applied in Excel and SPSS to
datasets downloaded from the
above sources, based on four
regional/sub-regional categories:

Central San Joaquin Valley (Central SJV)	The eight valley-floor counties traditionally described as the San Joaquin Valley (Fresno, Kern, Kings, Madera, Merced, Stanislaus, San Joaquin, and Tulare)
San Joaquin Valley- Adjacent (SJV-Adjacent)	The four SJVPHC counties that lie adjacent to the <i>Central San Joaquin Valley</i> counties listed above (Calaveras, Mariposa, San Benito, and Tuolumne)
San Joaquin Valley (SJV)	All twelve San Joaquin Valley counties (eight <i>Central SJV</i> and four <i>SJV</i> - **Adjacent**)
C.A	All 58 counties in the state, including the twelve in the SJV regional grouping
Non-San Joaquin Valley (Non-SJV)	The 46 counties in the state located outside the San Joaquin Valley

3.3 <u>Data Analysis:</u> Data for these regional groupings was then analyzed according to the data value type provided in each dataset (prevalence, rate per 1,000, etc.), most frequently by calculating means. While numerators for each county were provided in some datasets for some indicators, data collected for many indicators included only state and county percentages (for example, % of adults who smoke). Where raw numbers were provided, regional and state percentages were calculated by adding numerators and denominators for all counties and dividing the total numerator by the total denominator to identify regional/state percentage. For indicators that included data in rates, indexes, or percentages, means were calculated across

counties using the data as provided. Age-adjusted rates were used where provided in the original datasets.

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4. Discussion

- For most indicators both social determinants and health outcomes- the San Joaquin Valley region
- fares worse than other California counties, often by a large difference.
- Out the 107 indicators measured, the 3 NSJV regions show the greatest need for investment and
- resources on 76 (71%).
- 154 The tables below show the results of the analysis for each of the regional groupings by indicator:

Property	155						North	Central						
## Section 1995 199							San	San			Bay Area			
Color Colo	High School Completion	97 49%	92 11%		96 61%	83 68%		-	75.05%	91 20%	89.40%	88.03%	87 90%	90.01%
Column C	Some College	72.56%	57.14%	65.80%	72.74%	62.78%	51.87%	54.36%	49.67%	61.00%	78.28%	69.05%	60.08%	64.51%
Medicare consideration (1997)	Children Enrolled in Free or Reduced Lunch Program	63.00%	68.00%	69.00%	50.00%	57.33%	68.00%	76.00%	72.00%	52.00%	43.78%	50.86%	67.75%	58.27%
March Marc	Median Household Income	70,863	76,454	77,356	100,210	87,609	69,151	60,397	57,926	68,447	111,622	75,981	53,837	57,397
Secure Score 1,000	Homeownership	56.00%	64.31%	46.25%	56.96%	59.72%	56.76%	58.05%	59.27%	74.02%	58.69%	63.16%	63.79%	68.99%
According Segregation where from whether short of the state of the s	Severe Housing Cost Burden	19.00%	18.50%	24.00%	20.00%	18.83%	17.33%	16.75%	17.00%	14.71%	17.22%	15.71%	18.00%	16.36%
Bernale Cognetion 10.0000 10.000 10.0000 10.000 10.0000 10.00	Residential Segregation Index (Non-White/White)	55.66%	41.87%	58.04%	49.46%	58.35%	47.52%	52.43%	51.55%	22.38%	55.34%	48.41%	62.71%	50.63%
March Marc	Exercise Opportunities	89.00%	89.00%	98.00%	99.00%	92.17%	89.00%	75.00%	86.00%	70.29%	97.67%	88.43%	75.25%	68.00%
Second Assessment 1.50 4.55 1.50 1	Rural	10.35%	4.65%	0.60%	0.10%	11.75%	10.27%	17.53%	10.20%	68.14%	4.53%	18.60%	35.45%	60.16%
Property Works Contentionesses 1986 1976 19	Social Associations	5.55	4.25	6	6.7	6.72	4.77	4.5	4.3	6.13	6.98	5.89	6.65	7.19
Aur Trains framewal desired from francisco. Aur Trains framewal desired from francisco. Aur Trains framewal desired from francisco. Aur Trains framewal desired from framewal	Drinking Water Contaminants	384.15	547.99	608.23	426.74	465.18	731.51	643.54	670.07	509.06	301.59	386.31	315.42	357.87
Marches Personal Matters 10.10	Air- Toxic Chemical Release from Facilities	206.02	606.69	3,699.37	3,699.58	155.42	265.47	2,242.21	186.99	13.25	432.88	353.81	3.87	57.8
Lumberd Assess to Intellige Today Michael Collection of Childre of Children	Air- Diesel Particulate Matter	0.16	0.2	0.28	0.19	0.11	0.18	0.12	0.16	0.01	0.07	0.1	0.04	0.04
Lones Lone		5.77%	7.52%	1.46%	1.26%	4.27%	4.33%	5.71%		8.62%	1.89%	6.67%	8.24%	
Command Collection	Uninsured (Adults and Children)	8.50%	9.00%	10.00%	8.00%	9.00%	8.67%	9.25%	10.00%	8.43%	5.56%	7.29%	8.50%	7.55%
Second World Enforcement Second S	Uninsured Children	15.70%	13.95%	12.70%	9.50%	11.30%	15.10%	17.50%	17.10%	7.69%	7.40%	10.09%	10.13%	8.98%
Principle Prin	Dental Visit (Self-Report)	59.45%	57.95%	59.70%	66.80%	64.60%	57.33%	54.53%	54.50%	64.89%	761.87%	63.66%	59.15%	
Memoria Localist Providers 12-2-17 20-313 417-05 285-07 285-07 285-07 286-07	Primary Care Physicians	53.96	52.12 71.74	74.44 79.92	100.48 81.73	73.49	56.38 60.87	48.65	49.48 72.25	49.71	113.01	77.08	64.23	54.12
Presentable Longital Stage	Mental Health Providers	322.37 64.28	263.31 65.75	417.59	353.05 120.97	535.71	249.57	286.37 56.32	228.73 50.89	296.1 57.03	607.11	345.13 68.9	522	417.07
Adequate Prevated Care - 1921 (1977 1978) 27 2079 77 2079 27 2079 77 2	Preventable Hospital Stays	2018.00	2420.50	2458.00		1758.83	2785.00	2610.75	2674.00	2016.86	1833.44	2546.14		2247.55
Care Princial Activity (Self-Report)	Adequate Prenatal Care													
Excessive/Broag Christog [Self Regard]	Lack of Physical Activity (Self-Report)	26%	24%	22%	21%	21%	26%	28%	28%	19%	18%	21%	22%	21%
President Physical Districts (self-Report) 17% 17% 9% 17	Excessive/Binge Drinking (Self-Report)	20%	20%	18%	17%	21%	20%	19%	18%	23%	20%	20%	21%	22%
Verant of Protential Life Loss (Died Berlors Agr 75) 6000 7000 8000 8400 8150 7750 8700 8000 6010 6	Frequent Physical Distress (Self-Report)	12%	11%	10%	9%	10%	12%	13%	13%	10%	8%	10%	12%	11%
Center Diagnosis, Except Sain (Self-Report)	Years of Potential Life Lost (Died Before Age 75)	6000	7050	5600	4400	5150	7667	7250	8700	6950	4600	6414	9475	9780
Coronary Island Deserved Registratory Disease Deaths Astronomy State Coronary Island Process Coronary	Cancer Diagnosis, Except Skin (Self-Report)	5.6%	5.7%	5.2%	4.8%	5.5%	6.5%	7.0%	7.3%	6.2%	4.4%	6.0%	7.6%	7.2%
Prostate Cancer Deaths	Colorectal Cancer Deaths	11.4	13.9	12.3	10.5	10.6	14.1	13.1	12.1	15.9	10.8	12.1	14.6	11.8
Chronic Liver Disease & Circhesis Deaths 11-9 1.9.8 12-8 10-8 13-5 17-7 18-5 18-4 17-9 8-6 15-9 28-0 20-9 Chronic Obstructive Pulmonary Disease Deaths 5.7% 5.7% 5.7% 5.7% 5.5% 6.5% 5.5% 6.5% 6.5% 6.0	Prostate Cancer Deaths	16.5	22.6	18.6	17.4	17.3	20.9	17.4	21.7	16.2	18.6	20.7	21.2	19.5
Report 3.50% 3.	Chronic Liver Disease & Cirrhosis Deaths													
Ashma Blagnosis (self-Report) 9.5% 10.0% 9.2% 9.0% 9.7% 10.1% 10.5% 10.2% 10.2% 10.2% 9.0% 10.0% 10.8% 10.0% 10.8% 10.0%	Report)													
Coronary Heart Disease Diagnostic (Self-Report) Gradovascular Disease (EW INST 14.3 18.1 14.0 14.0 14.0 14.0 14.0 15.1 15.1 17.3 13.1 14.0	Asthma Diagnosis (Self-Report)	9.5%	10.0%	9.2%	9.0%	9.7%	10.1%	10.5%	10.2%	10.2%	9.0%	10.0%	10.8%	10.6%
Coronary Heart Disease Deaths G7.9 10.3.2 96.6 72.6 60.5 97.8 99.8 116.7 110.0 56.2 84.8 94.1 86.1	Coronary Heart Disease Diagnosis (Self-Report)	5.8%	5.7%	5.3%	4.8%	5.4%	6.1%	6.5%	6.6%	5.7%	4.6%	5.6%	6.4%	6.1%
Stroke Diagnosis (Self-Report) Stroke Deaths	Coronary Heart Disease Deaths	67.9	103.2	96.6	72.6	60.5	97.8	99.8	116.7	110.0	56.2	84.8	94.1	86.1
Obesty (Self-Report) 32,3% 36,9% 28,8% 23,0% 9.1% 9.0% 33,6% 35,0% 29,7% 24,3% 30,3% 31,9% 31,5% 10,000 30	Stroke Diagnosis (Self-Report)	2.9%	2.9%	2.7%	2.3%	2.6%	3.1%	3.3%	3.4%	2.7%	2.2%	2.7%	3.2%	3.0%
Diabetes Prevalence 12% 10% 9% 10% 12% 12% 12% 13% 9% 9% 10% 10% 9% 9% 10% 10% 9% 10				28.8%		29.7%							31.9%	
Syphilis Incidence (Males 15 - 44) Syphilis Incidence (Primary and Secondary, Males) Syphilis Incidence (Primary and Secondary, Males) 16 25.22 13.17 Congenital Syphilis Incidence 16 25.22 13.17 Congenital Syphilis Incidence 16 26.53 Chiamydia Incidence (14 26.53 Chiamydia In		12%				10%	12%	12%	13%				10%	
Congenital Syphilis Incidence 148.85 176.95 114.10 61.10 73.20 226.13 177.43 287.10 0.00 44.43 245.45 0.00 324.10 Chlamydia Incidence (3 Years) 571.00 526.00 622.00 412.00 420.00 529.00 572.00 590.00 590.00 359.00 380.00 382.00 382.00 Chlamydia Incidence (3 Years) 571.00 526.00 622.00 412.00 420.00 420.00 539.00 582.00 702.00 275.00 478.00 379.00 434.00 HIV Prevalence (3 Years) 369.00 381.00 669.00 277.00 169.00 185.00 179.00 258.00 192.00 452.00 163.00 216.00 127.00 Infant Death Rate (3 Years) 3.20 4.45 3.50 2.66 3.00 3.00 3.00 5.00 5.00 6.00 1.00 3.00 4.00 5.00 2.00 Infant Death Rate (7 Years) 4.00 5.00 4.00 3.00 3.00 5.00 5.00 6.00 1.00 3.00 4.00 5.00 2.00 Infant Death Rate (7 Years) 6.70 7.55 7.40 6.60 6.22 6.80 6.55 7.60 5.79 6.57 6.37 6.73 6.53 Low Birth Weight Infants (7 Years) 6.20% 7.23% 7.20% 7.20% 7.20% 6.61% 6.77% 7.37% 5.50% 6.52% 6.43% 6.43% 6.53% Teem Birth Rate (7 Years) 2.242 13.07 15.19 10.01 1.05 1.00 1.00 1.00 3.00 4.00 5.00 4.00 Total Tooth Loss (Self-Report) 10.65% 11.45% 9.30% 8.00% 9.42% 12.70% 13.78% 14.40% 9.87% 7.10% 10.00% 11.65%													23.2 62.8	23.0 53.2
Chlamydia Diagnosis														
HIV Prevalence (3 Years) 369.00 381.00 609.00 272.00 169.00 185.00 197.00 157.09 40.08 165.01 120.10 103.36 HIV Prevalence (3 Years) 369.00 381.00 609.00 272.00 169.00 185.00 179.00 250.00 192.00 163.00 121.00 163.00 163.00 121.00 163.00 163.00 121.00 163.00 121.00 163.00 121.00 163.00 121.00 163.00 163.00 121.00 163.00 163.00 121.00 163.00 163.00 121.00 163.00 16	Chlamydia Diagnosis					332.00								
Infant Death Rate (3 Years) 3.20 4.45 3.50 2.60 3.08 4.60 4.75 5.60 1.21 2.41 3.59 4.63 2.50														
Low Birth Weight Infants (3 Years) 6.70 7.55 7.40 6.60 6.42 6.80 6.95 7.60 5.97 6.57 6.37 6.33 6.53 Low Birth Weight Infants (7 Years) 6.0% 7.16% 7.23% 7.20% 6.66% 6.00% 6.0% 5.0% 6.00% 6.52% 6.13% 6.41% 7.24%	Infant Death Rate (3 Years)	3.20	4.45	3.50	2.60	3.08	4.60	4.75	5.60	1.21	2.41	3.59	4.63	2.50
Teen Birth Rate (7 Years)	Low Birth Weight Infants (3 Years)	6.70	7.55	7.40	6.60	6.42	6.80	6.95	7.60	5.97	6.57	6.37	6.73	6.53
Total Tooth Loss (Self-Report) 10.65% 11.45% 9.30% 8.00% 9.42% 12.70% 13.78% 14.40% 9.87% 7.16% 10.06% 12.73% 11.62% Drug Overdose Deaths (3 Years) 21.90 23.75 17.90 21.10 23.23 21.33 17.50 41.80 41.80 9.87% 7.16% 10.06% 12.73% 11.62% Drug Overdose Deaths (3 Years) Age Adjusted 21.22 18.77 14.21 15.50 17.76 17.29 13.45 31.54 17.53 18.92 13.60 40.21 15.71 Frequent Mental Distress (Self-Report) 14.65% 15.10% 14.80% 12.80% 14.50% 15.60% 15.90% 16.00% 15.40% 15.60% 15.90% 16.00% 15.40% 15.60% 15.90% 16.00% 15.40% 16.00% 10.00 16.00 17.00 18.00 17.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00	Teen Birth Rate (3 Years)	13.75	12.75	9.40	6.50	11.77	16.03	19.35	21.00	10.44	6.37	10.17	17.30	13.24
Drug Overdose Deaths (3 Years) Age-Adjusted 21.22 18.77 14.21 15.50 17.76 17.29 13.45 31.54 17.53 18.92 13.60 40.21 15.71 Frequent Mental Distress (Self-Report) 14.65% 15.10% 14.86% 12.80% 14.50% 15.60% 15.00% 15.60% 15.00% 15.40% 15.40% 12.66% 14.96% 14	Total Tooth Loss (Self-Report)	10.65%	11.45%	9.30%	8.00%	9.42%	12.70%	13.78%	14.40%	9.87%	7.16%	10.06%	12.73%	11.62%
Alcohol-Impaired Driving Deaths (23,04% 28,07% 21,59% 28,45% 34,59% 29,44% 32,56% 31,85% 36,72% 25,17% 27,24% 34,66% 30,76% Motor Vehicle Accident Deaths (3 Years) 10,45 15,25 9,00 6,60 10,87 18,17 18,28 20,50 16,63 7,30 14,47 23,43 27,25 Motor Vehicle Accident Deaths (7 Years) 10,00 13,00 8,00 7,00 11,00 16,00 16,00 17,00 16,00 7,00 14,00 22,00 19,00 Accident/Unintentional Injury Deaths (3 Years) 45,35 50,55 34,90 35,80 49,07 54,13 51,18 75,60 74,07 40,08 48,77 98,28 82,65 Accident/Unintentional Injury Deaths (5 Years) 57,89 59,16 44,65 44,07 66,85 66,04 63,50 84,94 116,32 54,07 66,59 124,29 116,27 Violent Crime (Reported) 347,00 367,00 488,00 214,00 349,00 640,00 497,00 545,00 374,00 402,00 312,00 554,00 462,00 Homicides (3 Years) 21,22 18,77 14,21 15,50 17,76 17,29 13,45 31,54 17,53 18,92 13,60 40,21 15,71 Homicides (7 Years) 27,99 5,78 6,29 2,22 2,92 7,08 6,21 11,45 0,00 3,51 1,35 2,17 0,53 Gun-Related Deaths (3 Years) 6,65 10,60 8,00 4,70 6,90 10,50 10,40 16,80 21,00 6,69 9,10 12,97 16,56 Gun-Related Deaths (5 Years) 8,90 11,30 7,90 9,70 11,12 10,73 10,38 13,40 20,53 10,46 12,77 23,70 21,27 Suicides (3 Years) 9,66 11,23 8,24 9,76 11,91 10,55 10,93 13,79 17,36 10,45 13,59 22,45 19,26 Great Sprucellosis 0,39 0,15 0,09 0,04 0,67 0,50 0,70 0,14 0,00 0,25 1,29 1,55 1,69 Creutzfeldt-Jakob Disease and other Transmissible Spongiform Encephalopathies 0,35 0,12 0,06 0,05 0,10 0,77 0,24 0,35 0,35 0,11 0,00 0,39 0,27 1,15 1,01 Typhoid Fever, case 0,39 0,12 0,06 0,05 0,10 0,77 0,24 0,35 0,35 0,11 0,00 0,39 0,27 1,15 1,01 Typhoid Fever, case 0,39 0,12 0,06 0,05 0,10 0,77 0,24 0,35 0,35 0,11 0,00 0,39 0,27 1,15 1,01 Typhoid Fever, case 0,39 0,12 0,06 0,05 0,10 0,77 0,24 0,35 0,35 0,11 0,00 0,39 0,27 1,15 1,01 Typhoid Fever, case 0,39 0,12 0,06 0,05 0,10 0,77 0,24 0,35 0,35 0,11 0,00 0,39 0,27 1,15 1,01 Typhoid Fever, case 0,39 0,12 0,46 0,50 0,50 0,10 0,77 0,24 0,38 0,39 0,15 1,79 0,84 0,85 1,54 1,41 0,00 0,39 0,27 1,15 0,66 1,83 1,44 1,44 1,44 1,44 1,44 1,44 1,44 1,4	Drug Overdose Deaths (3 Years) Age-Adjusted	21.22	18.77	14.21	15.50	17.76	17.29	13.45	31.54	17.53	18.92	13.60	40.21	15.71
Motor Vehicle Accident Deaths (7 Years) 10.00 13.00 8.00 7.00 11.00 16.00 17.00 16.00 7.00 14.00 22.00 19.00 Accident/Unintentional Injury Deaths (3 Years) 45.35 50.55 34.90 35.80 49.07 54.13 51.18 75.60 74.07 40.08 48.77 98.28 82.65	Alcohol-Impaired Driving Deaths	23.04%	28.07%	21.59%	28.45%	34.59%	29.44%	32.56%	31.85%	36.72%	25.17%	27.24%	34.46%	30.76%
Accident/Unintentional Injury Deaths (5 Years) 57.89 59.16 44.65 44.07 60.85 66.04 63.50 84.94 116.32 54.07 66.59 124.29 116.27 Violent Crime (Reported) 347.00 367.00 488.00 214.00 349.00 640.00 497.00 545.00 374.00 402.00 312.00 554.00 462.00 Homicides (3 Years) 21.22 18.77 14.21 15.50 17.76 17.29 13.45 31.54 17.53 18.92 13.60 40.21 15.71 Homicides (7 Years) 2.79 5.78 6.29 2.22 2.92 7.08 6.21 11.45 0.00 3.51 13.5 2.17 0.53 Gun-Related Deaths (3 Years) 6.65 10.60 8.00 4.70 6.90 10.50 10.40 16.80 21.00 6.69 9.10 12.97 15.55 Gun-Related Deaths (5 Years) 8.65 8.17 10.07 7.24 8.18 6.95 14.63 9.78 11.35 9.79 12.28 9.49 12.46 Suicides (3 Years) 9.66 11.23 8.24 9.76 11.91 10.73 10.38 13.40 20.53 10.46 12.77 23.70 21.27 Suicides (5 Years) 9.66 11.23 8.24 9.76 11.91 10.55 10.93 13.79 17.36 10.45 13.59 22.45 19.26 Great	Motor Vehicle Accident Deaths (7 Years)	10.00	13.00	8.00	7.00	11.00	16.00	16.00	17.00	16.00	7.00	14.00	22.00	19.00
Homicides (3 Years) 2.1.22 18.77 14.21 15.50 17.76 17.29 13.45 31.54 17.53 18.92 13.60 40.21 15.71 Homicides (7 Years) 2.79 5.78 6.29 2.22 2.92 7.08 6.21 11.45 0.00 3.51 1.35 2.17 0.53 Gun-Related Deaths (3 Years) 6.65 10.60 8.00 4.70 6.90 10.50 10.40 16.80 21.00 6.69 9.10 12.97 16.56 Gun-Related Deaths (5 Years) 8.65 8.17 10.07 7.24 8.18 6.95 14.63 9.78 11.35 9.79 12.28 9.49 12.46 Suicides (3 Years) 9.66 11.23 8.24 9.76 11.91 10.73 10.38 13.40 20.53 10.46 12.77 23.70 21.27 Suicides (5 Years) 9.66 11.23 8.24 9.76 11.91 10.55 10.93 13.79 17.36 10.45 13.59 22.45 19.26 Brucellosis 0.39 0.15 0.09 0.04 0.67 0.50 0.70 0.14 0.00 0.25 12.91 1.55 1.69 Creutzfeldt-Jakob Disease and other Transmissible Spongiform Encephalopathies 0.35 0.12 0.01 0.03 0.63 0.23 0.40 0.12 1.91 0.27 0.48 2.57 0.90 Hepatitis E, acute infection 0.56 0.11 0.04 0.03 0.24 0.35 0.35 0.35 0.11 0.00 0.39 0.27 1.15 1.01 Typhoid Fever, case 0.39 0.12 0.20 0.04 0.52 0.45 0.49 0.26 1.77 0.53 1.20 1.71 1.02 Dengue Virus Infection 0.32 0.66 0.05 0.10 0.72 0.24 0.28 0.12 1.88 0.40 0.55 1.94 0.85 1.54 1.41 0.00 0.25 0.48 0.85 1.54 1.41 0.00 0.28 0.48 0.39 0.15 1.88 0.40 0.55 1.83 0.50 0.66 1.83 0.50 0.50 0.77 0.50 0.99 0.50 0.50 0.70 0.50 0.99 0.50 0.50 0.50 0.70 0.50 0.50 0.50 0.50	Accident/Unintentional Injury Deaths (5 Years)	57.89	59.16	44.65	44.07	60.85	66.04	63.50	84.94	116.32	54.07	66.59	124.29	116.27
Gun-Related Deaths (3 Years) 6.65 10.60 8.00 4.70 6.90 10.50 10.40 16.80 21.00 6.69 9.10 12.97 16.56 Gun-Related Deaths (5 Years) 8.65 8.17 10.07 7.24 8.18 6.95 14.63 9.78 11.35 9.79 12.28 9.49 12.46 Suicides (3 Years) 9.66 11.23 8.24 9.76 11.91 10.55 10.93 13.79 17.36 10.45 13.59 22.45 19.26 Brucellosis 0.39 0.15 0.99 0.04 0.67 0.50 0.70 0.14 0.00 0.25 1.29 1.55 1.69 Creutzfeldt-Jakob Disease and other Transmissible Spongiform Encephalopathies 0.35 0.12 0.01 0.03 0.63 0.23 0.40 0.12 1.91 0.27 0.48 2.57 0.90 Hepatitis E, acute infection 0.56 0.11 0.04 0.03 0.24 0.35 0.35 0.11 0.00 0.39 0.27 1.15 1.01 Typhoid Fever, case 0.39 0.12 0.20 0.04 0.25 0.45 0.49 0.26 1.77 0.53 1.20 1.71 1.02 Dengue Virus Infection 0.32 0.66 0.05 0.10 0.72 0.24 0.28 0.12 1.88 0.40 0.55 0.94 0.90 Malaria 0.46 0.30 0.37 0.37 0.30 0.48 0.39 0.15 1.79 0.84 0.85 1.54 1.41 Coccidioidomycosis 6.99 14.86 14.19 8.85 23.83 19.58 59.39 306.20 6.96 4.87 2.16 0.66 1.85	Homicides (3 Years)	21.22	18.77	14.21	15.50	17.76	17.29	13.45	31.54	17.53	18.92	13.60	40.21	15.71
Suicides (3 Years) 8.90 11.30 7.90 9.70 11.12 10.73 10.38 13.40 20.53 10.46 12.77 23.70 21.27 Suicides (5 Years) 9.66 11.23 8.24 9.76 11.91 10.55 10.93 13.79 17.36 10.45 13.59 22.45 19.26 Brucellosis 0.39 0.15 0.09 0.04 0.67 0.50 0.70 0.14 0.00 0.25 1.29 1.55 1.69 Creutzfeltd-Jakob Disease and other Transmissible Spongiform Encephalopathies 0.35 0.12 0.01 0.03 0.63 0.23 0.40 0.12 1.91 0.27 0.48 2.57 0.90 Hepatitis E, acute infection 0.56 0.11 0.04 0.03 0.24 0.35 0.35 0.11 0.0 0.30 0.24 0.35 0.35 0.11 0.00 0.39 0.27 1.15 1.01 Typhoid Fever, case 0.39 0.12 0.20 0.	Gun-Related Deaths (3 Years)	6.65	10.60	8.00	4.70	6.90	10.50	10.40	16.80	21.00	6.69	9.10	12.97	16.56
Brucellosis 0.39 0.15 0.09 0.04 0.67 0.50 0.70 0.14 0.00 0.25 1.29 1.55 1.69 Creutzfeldt-Jakob Disease and other Transmissible Spongiform Encephalopathies 0.35 0.12 0.01 0.03 0.63 0.23 0.40 0.12 1.91 0.27 0.48 2.57 0.90 Hepatitis E, acute infection 0.56 0.11 0.04 0.03 0.24 0.35 0.35 0.11 0.00 0.39 0.27 1.15 1.01 Typhoid Fever, case 0.39 0.12 0.20 0.04 0.25 0.45 0.49 0.26 1.77 0.53 1.20 1.71 1.02 Dengue Virus Infection 0.32 0.06 0.05 0.10 0.72 0.24 0.28 0.12 1.88 0.40 0.55 0.94 0.90 Malaria 0.46 0.30 0.37 0.37 0.30 0.48 0.39 0.15 1.79 0.84	Suicides (3 Years)	8.90	11.30	7.90	9.70	11.12	10.73	10.38	13.40	20.53	10.46	12.77	23.70	21.27
Creutzfeldt-Jakob Disease and other Transmissible Spongiform Encephalopathies 0.35 0.12 0.01 0.03 0.63 0.23 0.40 0.12 1.91 0.27 0.48 2.57 0.90 Hepatitis E, acute infection 0.56 0.11 0.04 0.03 0.24 0.35 0.35 0.11 0.00 0.39 0.27 1.15 1.01 Typhoid Fever, case 0.39 0.12 0.20 0.04 0.25 0.45 0.49 0.26 1.77 0.53 1.20 1.71 1.02 Dengue Virus Infection 0.32 0.06 0.05 0.10 0.72 0.24 0.28 0.12 1.88 0.40 0.55 0.94 0.90 Malaria 0.46 0.30 0.37 0.37 0.30 0.48 0.39 0.15 1.79 0.84 0.85 1.54 1.41 Coccidioidomycosis 6.99 14.86 14.19 8.85 23.83 19.58 59.39 306.20 6.96 4.	Brucellosis													
Hepatitis E, acute infection 0.56 0.11 0.04 0.03 0.24 0.35 0.35 0.11 0.00 0.39 0.27 1.15 1.01 Typhoid Fever, case 0.39 0.12 0.20 0.04 0.25 0.45 0.49 0.26 1.77 0.53 1.20 1.71 1.02 Dengue Virus Infection 0.32 0.06 0.05 0.10 0.72 0.24 0.28 0.12 1.88 0.40 0.55 0.94 0.90 Malaria 0.46 0.30 0.37 0.37 0.30 0.48 0.39 0.15 1.79 0.84 0.85 1.54 1.41 Coccidioidomycosis 6.99 14.86 14.19 8.85 23.83 19.58 59.39 306.20 6.96 4.87 2.16 0.66 1.83 Heat measure 60 28 0 0 3 77 90 91 9 2 62 3 25		0.35	0.12			0.63	0.23	0.40		1.91	0.27	0.48	2.57	0.90
Dengue Virus Infection 0.32 0.06 0.05 0.10 0.72 0.24 0.28 0.12 1.88 0.40 0.55 0.94 0.90 Malaria 0.46 0.30 0.37 0.37 0.30 0.48 0.39 0.15 1.79 0.84 0.85 1.54 1.41 Coccidioidomycosis 6.99 14.86 14.19 8.85 23.83 19.58 59.39 306.20 6.96 4.87 2.16 0.66 1.83 Heat measure 60 28 0 0 3 77 90 91 9 2 62 3 25	Hepatitis E, acute infection												1.15 1.71	
Coccidioidomycosis 6.99 14.86 14.19 8.85 23.83 19.58 59.39 306.20 6.96 4.87 2.16 0.66 1.83 Heat measure 60 28 0 0 3 77 90 91 9 2 62 3 25	Dengue Virus Infection	0.32		0.05		0.72	0.24	0.28		1.88	0.40	0.55	0.94	0.90
	Coccidioidomycosis	6.99	14.86	14.19	8.85		19.58	59.39	306.20	6.96	4.87	2.16	0.66	1.83
·						0.49								

156 The tables below show the rank of the analysis for each of the regional groupings by indicator:

Southern Border Rank	Inland Empire Rank	Los Angeles County Rank	Orange County Rank	Central Coast Rank	North San Joaquin Valley Rank	Central San Joaquin Valley Rank	Kern County Rank	Eastern Sierra Rank	Bay Area Rank	Sacramento Rank	Redwood Coast Rank	North State Rank
6	9	10	7	8	11	13	12	1	3	4	5	2
3 6	10 5	5 8	2	7	12 10	11 13	13 12	<u>8</u> 7	1	4	9	6 9
7	9	11	2	5	9	13	12	4	1	3	8	6
12	5	8	1	3	5	8	10	5	2	3	10	13
7 13	5 3	4 8	2	3 5	8 10	10 12	11 11	9	1	6 9	13 6	12 7
12	3	13	10	6	11	9	7	1	8	5	4	2
11	10	13	12	9	6	8	7	1	5	3	4	2
11 3	9	13	12 1	10 13	7	4 10	5 8	1 5	<u>6</u> 2	2 5	10	3 12
10	2	11	5	12	3	8	7	1	9	4	13	6
11	2	13	6	4	2	5	10	1	9	7	12	8
5	5	2	1	4	5	11	9	12	3	8	10	13
12 7	6	12	7	8 8	10 6	11 9	9 5	1 13	5 3	4 10	3 11	2 12
6	4	5	1	3	8	10	9	12	2	7	11	13
9	13	7	4	3	10	11	12	6	2	8	5	1
8	8	8	1	7	8	8	8	3	5	3	6	2
4 8	9	10	6	7 13	13 12	11 10	12 11	8	3	5 9	2 5	3 7
6	10	12	13	4	7	11	5	2	9	8	1	3
4	11	4	4	2	4	11	11	4	2	4	1	4
8	12	13	11	6	10	7	8	1	4	5	2	2
11 7	4	7 2	2	3 4	8 5	10	11 9	6 12	1 2	5 8	13	9
10	10 5	4	2	3	7	6 9	12	8	3 1	6	11 11	13 13
6	9	12	4	9	8	11	12	5	1	2	6	3
5	9	3	2	12	4	6	9	13	1	8	7	11
11	9	8 2	4	7 5	10 8	13 7	12	9	11	5 6	6 12	3 10
3 8	10	7	2	4	11	12	13 13	3	11	5	9	6
9	10	4	2	5	7	13	12	11	1	3	6	8
3	9	7	5	12	13	4	8	11	6	10	1	2
8 9	11 8	3	6	2	12 10	10 12	13 13	9 11	2	7	3 6	5 5
6	8	9	1	3	13	11	13	11 5	4	10	2	7
13	5	3	1	4	8	6	7	11	2	9	10	12
13	11	3	1	2	10	4	5	9	12	7	6	8
7 10	11 9	5 7	3	3	5 10	8 12	10 12	9	3	3	12 7	13 3
10	13	7	3	2	7	10	10	3	1	5	7	5
5	5	2	1	10	5	4	2	13	5	5	10	12
4	6	2	2	4	8	10	10	8	1	6	12	12
9	7	3	2	3	9	12 8	12 12	3 11	2	3 5	9 13	7 10
5	8	4	1	3	10	9	11	7	2	6	12	13
2	6	2	2	5	9	8	10	10	1	6	10	13
5	6	3	2	4	9	10	12	8	1	7	13	11
4	11 10	6 8	8	3 2	13 11	5 9	12 6	9	3	2 6	10 12	7 5
1	6	2	3	5	10	7	9	11	4	8	13	12
2	13	7	5	3	10	4	12	1	6	9	11	8
10	6	6	2	4	11	12	13	3	1	4	9	8
3 5	6	3	2	5 4	8 9	11 10	10 12	9	1	7	13 13	12 11
2	10	4	3	5	9	8	13	6	1	7	12	11
4	6	3	1	5	8	11	10	9	2	7	13	12
9	8	7	1	2	13	12	10	3	6	4	11	5
8 7	6 10	3 5	2	3	9 11	12 13	13 12	6	2	5 8	11 9	9
3	11	8	4	2	9	10	13	12	1	5	7	6
8	12	4	2	3	9	13	9	6	1	5	9	7
7	7	4	2	3	10	12	13	4	1	4	11	9
3 9	6 13	3	4	7	12 10	9 12	5	10 4	2	11	13	8 7
11	9	8	3	5						6		
9	9	5					11 12	2	1	<u>6</u> 5	8 7	4
12	10 11		1	5	10 9	12 9	12 13	2 1	1	5 5	8 7 5	4 1
10	1 17	9	2	5 4	10 9 11	12 9 8	12 13 13	2 1 1	1 1 3	5 5 5	8 7 5 7	4 1 6
7		13	2 12	5 4 4	10 9 11 7	12 9 8 6	12 13 13 8	2 1 1	1 1 3 9	5 5	8 7 5 7 3	4 1 6 2
	11 8	13 13 6	2 12 12 4	5 4 4 4 5	10 9 11 7 7	12 9 8 6 5	12 13 13 8 9	2 1 1	1 1 3 9 8	5 5 5 5 6 11	8 7 5 7 3 2	4 1 6 2 3 13
10	11 8 8	13 13 6 11	2 12 12 4 5	5 4 4 4 5	10 9 11 7 7 10 9	12 9 8 6 5 9	12 13 13 8 9 12	2 1 1 1 1 1	1 1 3 9 8 3 6	5 5 5 5 6 11	8 7 5 7 3 2 1	4 1 6 2 3 13
10 10	11 8 8 8	13 13 6 11 11	2 12 12 4 5	5 4 4 4 5 4 5	10 9 11 7 7 10 9	12 9 8 6 5 9 12	12 13 13 8 9 12 13	2 1 1 1 1 1 1	1 1 3 9 8 3 6 7	5 5 5 5 6 11 3	8 7 5 7 3 2 1 7	4 1 6 2 3 13 2
10	11 8 8	13 13 6 11	2 12 12 4 5	5 4 4 4 5	10 9 11 7 7 10 9	12 9 8 6 5 9	12 13 13 8 9 12	2 1 1 1 1 1	1 1 3 9 8 3 6	5 5 5 5 6 11	8 7 5 7 3 2 1	4 1 6 2 3 13
10 10 10 10 6	11 8 8 8 11 11 9	13 13 6 11 11 13 13 7	2 12 12 4 5 4 8 9	5 4 4 4 5 4 5 4 5	10 9 11 7 7 10 9 9 6 5	12 9 8 6 5 9 12 12 5 4	12 13 13 8 9 12 13 13 9 8	2 1 1 1 1 1 1 2 6	1 1 3 9 8 3 6 7 12 12	5 5 5 5 6 11 3 3 3 2	8 7 5 5 7 3 2 2 1 1 7 6 6 7 7 1 1 1 1 1 1	4 1 6 2 3 13 2 2 1 1 1 3
10 10 10 10 10 6 6	11 8 8 8 11 11 9	13 13 6 11 11 13 7 6	2 12 12 4 5 4 8 9 4	5 4 4 4 5 5 4 5 4 3 5 3	10 9 11 7 7 10 9 9 6 5 10	12 9 8 6 5 9 12 12 5 4 12 9	12 13 13 8 9 12 13 13 9 8 13 13	2 1 1 1 1 1 1 2 6 1	1 3 9 8 3 6 7 12 12 2 3	5 5 5 6 11 3 3 3 2 8 6	8 7 5 7 3 2 1 7 6 7 7 11	4 1 6 2 3 13 2 2 1 1 1 3 3
10 10 10 10 6 6	11 8 8 8 8 11 11 9 9	13 6 6 11 11 13 13 7 6	2 12 12 4 5 4 8 9 4 3 6	5 4 4 5 4 5 4 5 3 5 3 3	9 11 7 7 10 9 9 6 5 10 9	12 9 8 6 5 9 12 12 5 4 12 9	12 13 13 8 9 12 13 13 9 8 13 13	2 1 1 1 1 1 1 2 6 1 1	1 1 3 9 8 3 6 7 12 12 12 2 3 5	5 5 5 5 6 11 3 3 3 2 8 6	8 7 5 7 3 2 1 7 6 7 7 11 9	4 1 6 2 3 13 2 2 2 1 1 1 3 3
10 10 10 10 6 6	11 8 8 8 11 11 9	13 13 6 11 11 13 7 6	2 12 12 4 5 4 8 9 4	5 4 4 4 5 5 4 5 4 3 5 3	10 9 11 7 7 10 9 9 6 5 10	12 9 8 6 5 9 12 12 5 4 12 9	12 13 13 8 9 12 13 13 9 8 13 13	2 1 1 1 1 1 1 2 6 1	1 3 9 8 3 6 7 12 12 2 3	5 5 5 6 11 3 3 3 2 8 6	8 7 5 7 3 2 1 7 6 7 7 11	4 1 6 2 3 13 2 2 1 1 1 3 3
10 10 10 10 6 6 7 2 9	11 8 8 8 8 11 11 9 9 12 10 7 8	13 6 6 11 11 13 13 7 6 11 11 13	2 12 12 4 4 8 9 4 3 6 4 2 2	5 4 4 4 5 5 4 5 4 3 5 5 3 3 2 6 6	9 11 7 7 7 10 9 6 5 10 9 9 8	9 8 6 5 9 12 12 5 4 12 9 10 9	12 13 13 8 9 12 13 13 9 8 13 13 13 13 13 13	2 1 1 1 1 1 1 2 6 1 1 1 1 5 3	1 1 3 9 8 3 6 7 12 12 2 3 5 7	5 5 5 5 6 11 3 3 3 2 2 8 6 2 2 4	8 7 5 7 3 2 1 7 6 6 7 7 11 9 8 5 11	4 1 6 2 3 13 2 2 1 1 1 3 2 4 4 12 8 7
10 10 10 10 6 6 7 2 9 10	11 8 8 8 11 11 9 9 12 10 7 8 8	13 13 6 11 11 13 13 7 6 11 11 3 5 3 5	2 12 12 4 5 4 8 9 4 3 6 4 2 2	5 4 4 4 5 4 5 5 4 4 3 5 3 2 6 6	10 9 11 7 7 10 9 9 6 5 10 9 9 8 10	12 9 8 6 5 9 12 12 5 4 12 9 10 9 12 12	12 13 13 8 9 12 13 13 9 8 13 13 13 13 13 13 13	2 1 1 1 1 1 1 1 2 6 1 1 1 1 1 2 5 3 3 5 5 5	1 3 9 8 8 3 6 7 12 2 3 5 7 11	5 5 5 5 6 11 3 3 3 2 8 6 2 5 6 4 4 4 6	8 7 7 5 7 3 2 1 7 6 7 7 7 11 9 8 5 11 11	4 1 6 2 3 3 13 2 2 1 1 3 2 2 4 4 12 8 7
10 10 10 10 6 6 7 2 9 10 7	11 8 8 8 11 11 11 9 9 12 10 7 8 8	13 13 6 11 11 13 7 6 11 13 7 6 11 11 3 3 5 3 2	2 12 12 4 5 4 8 9 4 3 6 6 4 2 2	5 4 4 4 5 5 4 5 5 4 3 5 3 3 2 6 6 6	9 11 17 7 7 7 10 9 6 5 10 9 8 10 9 10 9 8 10 9 10 9 5 5	12 9 8 6 5 9 12 12 5 4 12 9 10 9 11 12 12 11 12 11 12 13 14 15 16 17 18 18 18 18 18 18 18 18 18 18	12 13 13 8 9 12 13 13 9 8 13 13 13 13 13 13 13 13 13	2 1 1 1 1 1 1 1 2 6 1 1 1 1 1 3 3 5 5	1 1 3 9 8 3 6 7 12 12 2 2 3 5 7 7	5 5 5 5 6 11 3 3 3 2 8 6 6 2 2 5 4 4 6	8 7 7 5 7 3 3 2 2 1 1 7 7 6 6 7 7 7 1 1 1 9 8 8 5 5 1 1 1 1 1 1 1 1 1 3 3	4 1 6 2 3 13 2 2 1 1 1 3 2 4 4 12 8 7
10 10 10 10 6 6 7 2 9 10	11 8 8 8 11 11 9 9 12 10 7 8 8	13 13 6 11 11 13 13 7 6 11 11 3 5 3 5	2 12 12 4 5 4 8 9 4 3 6 4 2 2	5 4 4 4 5 4 5 5 4 4 3 5 3 2 6 6	10 9 11 7 7 10 9 9 6 5 10 9 9 8 10	12 9 8 6 5 9 12 12 5 4 12 9 10 9 12 12	12 13 13 8 9 12 13 13 9 8 13 13 13 13 13 13 13	2 1 1 1 1 1 1 1 2 6 1 1 1 1 1 5 3 3 5 5 5	1 3 9 8 8 3 6 7 12 2 3 5 7 11	5 5 5 5 6 11 3 3 3 2 8 6 2 5 6 4 4 4 6	8 7 7 5 7 3 2 1 7 6 7 7 7 11 9 8 5 11 11	4 1 6 2 3 3 13 2 2 1 1 3 2 2 4 4 12 8 7
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157 Indicators for which NSJV Counties Fare the Worst:

Indicators	Non NSJV	NSJV	Diff
Average of Some College (%) (2015-2019)	61.75%	51.46%	10.29%
Average of Rural (%) (2021)	20.21%	10.33%	9.88%
Average of Children Enrolled in Free or Reduced Lunch Program (%) (2020-2021)	60.67%	68.00%	7.33%
Average of High School Completion (%) (2017-2021)	83.60%	76.87%	6.73%
Average of Adverse Childhood Experiences	63.48%	67.67%	4.19%
Average of Adequate Prenatal Care (%) (2019-2021)	73.73%	69.57%	4.17%
Average of Homeownership (%) (2017-2021)	60.77%	56.76%	4.00%
Average of No Leisure-Time Physical activity (%) (2020)	22.47%	26.40%	3.93%
Average of Dental Visit (%) (2021)	61.05%	57.33%	3.72%
Average of Median Household Income (#) (2019)	74841.7	69150.7	5691.0
Average of Gonorrhea Incidence (Males, 3 Years) (#) (2018-2020)	2471.0	493.9	1977.1
Average of Years of Potential Life Lost (3 Years) (#) (2018-2020)	6780.8	7666.7	885.9
Average of Pesticides (#) (2019-2021)	377.2	1138.2	761.0
Average of Toxic Chemical Release from Facilities (#) (2021)	952.2	265.5	686.8
Average of Preventable Hospitalizations (#) (2021)	2164.0	2785.0	621.0
Average of Drinking Water Contaminants Index (#) (2021)	468.0	731.5	263.5
Average of Violent Crime Rate (#) (2014 & 2016)	409.3	640.4	231.1
Average of Syphilis Incidence (Males, 3 Years) (#) (2018-2020)	299.9	93.3	206.6
Sum of Other Primary Care Providers (#) (2021)	366.3	182.0	184.3

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1595. Theoretical and Managerial Implications

160 **5.1 Managerial Implications**

- Provide regional information to local health departments to support the important work they do
- in their jurisdictions and provide a tool for increased collaboration across counties.

5.2 Theoretical Implications

- 164 Inform policymakers, communities and community-based organization ns about similarities and
- disparities within the region and across regions in California (both related to health outcomes and

to their social determinants), and to support their efforts to improve health and quality of life in 166 the Valley. 167 168 5.3 Limitation 169 170 Several limitations to this analysis have been identified, as follows: 171> While an attempt was made to use the most recent available data, the included data was collected prior to the COVID-19 pandemic. It is likely that conditions in the state and its regions 172 (including the San Joaquin Valley) have been hugely affected by the pandemic, and this should 173 be considered when reading the report. 174 175 Aggregated, county-level data, rather than data on individual persons, was used in the analysis. 176≻ Because of this, differences in county population sizes are not accounted for. All counties hold 177 the same weight in the analysis, regardless of size. 178 179 The Non-SJV grouping includes counties with several diverse geographical sub-regions (from 180≻ far northern rural to urban Los Angeles), whereas the SJV group and its sub-groups (Central SJV 181 and SJV-Adjacent) are more homogeneous geographically. In addition, this grouping includes a 182 much larger number of counties (46 as opposed to just twelve, for example). 183 184 No statistical analysis was conducted, and it can therefore not be confirmed whether identified 186 differences are not the result of chance.

Logical assumptions must be made about possible connections between social determinants of health and health outcomes based on the results of this analysis, as we did not include an investigation of how indicators included in the report relate to each other. In addition, information about historical and existing systems and root causes for disparities was not included (for example, probable causes for lower high school completion rates in the Valley). A great deal of evidence18 has established a connection between social conditions (such as structural racism and poverty) and health outcomes, however, and it is now widely accepted to address social conditions as determinants of health.

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Data on race/ethnicity was available for only a handful of indicators and the data for different racial and ethnic groups that was collected did not include all the racial and ethnic groups that exist in the state and the Valley. In addition, many of the numbers for several racial/ethnic groups were missing for smaller counties. Racial and ethnic breakdowns and comparisons will be provided in a separate, upcoming report.

Data for several indicators was missing or unreliable for smaller counties, both in the Valley and in other counties in the state.

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The report does not include information at the level of individual counties, which would provide additional context and clarity about the findings. A follow-up analysis of data for individual counties in the Valley is planned for the near future.

Several indicators (all of those from the CDC PLACES dataset) are based on self-report data from the Behavioral Risk Factor Surveillance Survey (BRFSS), and therefore dependent on respondents' knowledge about their health conditions and willingness to disclose them. It is possible that some respondents had undiagnosed health conditions they were not aware of when interviewed.

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2166. Conclusion

We have learned from an expansive body of research that health is determined largely by the social conditions we find ourselves in, based on where we live at all levels- from the home we live into the nation we live in. The findings presented here show notable disparities in the social determinants of health in multiple areas of life, including education, economic well-being, pollution, and access to healthy foods. It is not therefore surprising that regional disparities related to health outcomes were also found in this analysis, with the San Joaquin Valley region having the greatest need for support in improving outcomes of health for all its residents.

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Recommendations:

2261) Economic Development

- 227• Provide tax incentives, grants, and workforce training funds to support growth of clean energy,
- ag-tech, and advanced manufacturing jobs. Target skills training in solar, wind, energy storage,
- 229 precision agriculture, robotics, and automation.
- 230• Invest in infrastructure like high-speed internet, transit, and utilities to attract businesses. Create
- "innovation hubs" with incubator space, shared facilities, and streamlined regulations.

- 232• Fund downtown revitalization, mixed-use development, and placemaking initiatives to spur
- investment in struggling communities. Prioritize walkable design and small business support.
- 234• Increase microloan programs, entrepreneurship training, and minority business mentorships.
- Offer legal/accounting advice and marketing help.

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2372) Healthcare Access

- 238• Expand Medi-Cal coverage and enrollment assistance to increase health insurance rates. Fund
- 239 more clinics, telehealth, urgent care, and mobile health access.
- 240 Support pipeline programs and loan forgiveness to attract more healthcare workers of all types to
- the region. Ensure adequate linguistically/culturally competent staff.
- 242• Invest in maternal, infant, and early childhood home visiting programs to improve prenatal care
- 243 access and reduce ACEs.
- 244• Implement place-based interventions like lead remediation, smoke-free housing, air filtration
- systems, and urban greening to address environmental health risks.

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247**3**) Education

- 248• Increase funding for high-quality universal pre-K programs to foster early learning. Expand
- 249 Head Start enrollment.
- 250• Provide college prep, mentoring, and financial aid/scholarship programs to improve graduation
- and college attainment rates.
- 252• Enhance school-based health services, mental health support, nutrition programs, and social
- 253 services to address barriers to learning.

254●	Fund 1	more adult education, technical training, and upskilling programs. Offer skills certificates,
255	apprer	nticeships, and work-based learning.
256		
257 8.	Refer	ences
258	-	2023 County Health Rankings
259	-	Adverse childhood experiences have a lasting, harmful effect on health and wellbeing
260	-	U.S. Census Bureau:
261		https://data.census.gov/table/ACSDT5Y2021.B19080?q=B19080&g=040XX00US060000000000000000000000000000000
262		<u>\$0500000</u> ,
263		https://data.census.gov/table/ACSST5Y2021.S2801?q=S2801&g=040XX00US06\$05
264		<u>00000</u>
265	-	HUD's Office of Policy Development and Research
266	-	CalEnviroScreen 4.0 Excel Spreadsheet and Data Dictionary
267	-	Feeding America
268	-	Economic Research Service, U.S. DEPARTMENT OF AGRICULTURE
269	-	PLACES: Local Data for Better Health, County Data 2023 release
270	-	<u>Data.cms.gov</u>
271	-	National Center for Health Statistics Mortality Data on CDC WONDER
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9.Appendix

Time	Contents
Saturday September 9, 2023	Project Group Forms
Wednesday September 27, 2023	Project Proposal Presentation
Saturday October 7, 2023	Made progress on the introduction part
Saturday October 14, 2023	Made progress on the literature review
Saturday October 28, 2023	Made progress on the data collection & preparation
Saturday November 11, 2023	Made progress on the data analysis and visualization
Saturday December 2, 2023	Made progress on the findings and discussions
Saturday December 9, 2023	Made progress on the conclusion
Wednesday December 13, 2023	Final Project Paper Submission and Final Project Presentation Slides Submission