Community Health Needs Assessment 2020-2023

Yolo County Health and Human Services Agency, Community Health Branch
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2019 Community Health Needs Assessment/Community Health Assessment

Conducted on behalf of

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Acknowledgements

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Executive Summary

Purpose

The purpose of this joint community health needs assessment (CHNA)/community health assessment (CHA) was to identify and prioritize significant health needs of the Yolo County community. The priorities identified in this report help to guide health improvement efforts of both Woodland Memorial Hospital, Sutter Davis Hospital and Yolo County Health and Human Services, Community Health Branch.

This CHNA report meets requirements of the Patient Protection and Affordable Care Act (and, in California, Senate Bill 697) that not-for-profit hospitals conduct a CHNA at least once every three years, as well as the Public Health Accreditation Board (PHAB) CHA requirements. The CHNA/CHA was conducted by Community Health Insights (www.communityhealthinsights.com). Multiple other community partners participated in and collaborated to conduct the CHNA, including CommuniCare Health Centers and Winters Healthcare.

Community Definition

Yolo County was chosen as the geographical area for the CHNA/CHA because it is the primary service area of the two hospitals participating in the joint assessment and is the statutory service area of the public health department. Yolo County is located northwest of Sacramento along the Interstate 5 corridor and includes both urban and rural communities. The City of Woodland is the county seat of Yolo County. Community service providers and community members described Yolo County during primary data collection for the CHNA/CHA as "diverse in income, race/ethnicity, and rural and urban status" with many "longtime county residents."

Assessment Process and Methods

The data used to conduct the CHNA were identified and organized using the widely recognized Robert Wood Johnson Foundation's County Health Rankings model.[1] This model of population health includes many factors that impact and account for individual health and well-being. Further, to guide the overall process of conducting the assessment, a defined set of data-collection and analytic stages were developed. These included the collection and analysis of both primary and secondary data. Primary data included interviews with 61 community health experts, social-service providers, and medical personnel in one-on-one and group interviews, as well as one town hall meeting. Further, 132 community residents participated in three focus groups across the county, and 2,291 residents completed the community health assessment survey.

Using a social determinants of health focus to identify and organize secondary data, datasets included measures to described mortality and morbidity and social and economic factors such as income, educational attainment, and employment. Further, measures also included indicators to describe health behaviors, clinical care (both quality and access), and data to describe the physical environment.

Process and Criteria to ID and prioritize SHNs
Primary and secondary data were analyzed to identify and prioritize significant health needs. This began by identifying 10 potential health needs (PHNs). These PHNs were those identified in the previously conducted health assessments with area hospitals. Data were analyzed to discover which, if any, of the PHNs were present in the area. After these were identified, the health needs were prioritized based on an analysis of primary data sources that identified the PHN as a significant health need (SHN).

List of Prioritized SHNs
The following SHNs were identified and are listed below in prioritized order:

1. **Access to mental/behavioral/substance abuse services**
2. **Injury and disease prevention and management**
3. **Access to basic needs such as housing, jobs and food**
4. **Active living and health eating**
5. **Access to quality primary care health services**
6. **Access and functional needs**
7. **Access to specialty and extended care**
8. **Safe and violence-free environment**
9. **Pollution-free living environment**
10. **Access to dental care and preventive services**

Resources Potentially Available to meet the Significant Health Needs
In all, 292 resources were identified that were potentially available to meet the identified SHNs in the Yolo County area. The identification method included starting with the list of resources from previous area health assessments, verifying that the resource still existed, and then adding newly identified resources identified as part of the 2019 assessment.

Conclusion
This CHNA/CHA report details the needs of the Yolo County community as a part of a successful collaborative partnership between Sutter Davis Hospital, Woodland Memorial Hospital, and Yolo County Health and Human Services Community Health Branch. It provides both an overall health and social examination of Yolo County and a deeper examination of the needs of community members living within areas of the county experiencing disproportionately unmet health needs. The work provides a comprehensive profile to guide decision-making for implementation of community-health-improvement efforts. This report also serves as an example of a successful collaboration between healthcare systems and local public health departments to provide meaningful insights to support improved health in the community they serve.

Introduction and Purpose

A critical first step to community health improvement planning is a deep understanding of the community's needs. Both nonprofit hospitals nationwide and local public health departments conduct community health assessments to guide community benefit investment and inform community prevention efforts as part of a strategic community health improvement focus.

California state and federal laws require that nonprofit hospitals conduct a community health needs assessment (CHNA) every three years. Nationally, state, local and tribal health departments are pursuing "public health accreditation" from the national Public Health Accreditation Board (PHAB), and a community health assessment (CHA) is a crucial component of this. Though titled differently, CHNAs and CHAs are one and the same, both focusing on important key components, including a systematic collection and analysis of data; information on health status, health needs, and other key social determinants of health; community engagement and input; collective participation; and identification of community assets and resources.

The definition of a community health need is similar for the CHNA and the CHA. Federal regulations define a *health need* accordingly from CHNAs: "Health needs include requisites for the improvement or maintenance of health status in both the community at large and in particular parts of the community (such as particular neighborhoods or populations experiencing health disparities)".[1] Meanwhile, PHAB refers to health needs as "those demands required by a population or community to improve their health status".[2] Both CHNAs and CHAs guide the development of community health improvement efforts aimed at addressing the identified needs. Hospital CHNAs refer to these as implementation plans, while public health agencies call them community health improvement plans or CHIPs. Given the similarities between the CHNA and CHA processes, national experts are calling for nonprofit hospitals and public health departments to work together on local health assessments and community health improvement efforts.[3]

This report documents the processes, methods, and findings of a collaborative CHNA/CHA conducted on behalf of a partnership between Sutter Davis Hospital (Sutter Health), Woodland Memorial Hospital and Yolo County Health and Human Services Community Health Branch. Other partners involved included CommuniCare Health Centers and Winters Healthcare. A steering committee consisting of 14 various community health experts guided the CHNA/CHA process. The collaboration between the hospitals and the county emphasized a team approach to addressing the key components of the CHNA/CHA. Each partner was committed to the process, engaged in regular meetings, provided timely feedback to analysis, and willingly shared expertise to support the successful completion of the report. The CHNA/CHA was conducted over a period of eight months, beginning in February 2018 and concluding October 2018. This CHNA/CHA report meets the requirements of the Patient Protection and Affordable Care Act

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[1] *Federal Register*, Vol. 79, No. 250, (Wednesday, December 31, 2014). Department of the Treasury, Internal Revenue Service.

[2] Public Health Accreditation Board (2011, September). Acronyms and Glossary of Terms, Version 1.0.

[3] Burnett, K. (2012, February). Best Practices for Community Health Needs Assessment and Implementation Strategy Development: A review of scientific methods, current practices and future potential. Public Health Institute on behalf of Center for Disease Control and Prevention.

(and in California of Senate Bill 697). In addition, this report meets the requirements set out by PHAB for conducting a CHA as a part of a local health department needs assessment.

Organization of This Report

This report follows federal guidelines issued on how to document a CHNA/CHA. First, it describes the prioritized listing of significant health needs identified through the assessment, along with a description of the process and criteria used in identifying and prioritizing these needs. Next, it details the methods used to conduct the CHNA/CHA, including how data were collected and analyzed. Third, it details the community served by partners and how the community was identified. Fourth, it provides a description of how partner organizations solicited and considered the input received from persons who represented the broad interests of the community served. Next it identifies and describes resources potentially available to meet these needs. Finally, it gives a summary of the impact of actions taken by each hospital (Sutter Davis Hospital and Woodland Memorial Hospital) to address significant health needs identified in the hospital's previous assessment.

A detailed methodology section titled "Yolo County Area 2018 CHNA/CHA Technical Report" is included in this report (see pp. 32-89) which contains an in-depth description of the methods used for collection and analysis of data and compiling the results to identify and prioritize significant health needs.

Findings

Prioritized Significant Health Needs (SHN)

The analysis of data included both primary and secondary to identify and prioritize the significant health needs within the Yolo County area. In all, 10 significant health needs were identified. After these were identified they were prioritized based on an analysis of primary data sources (key informant interviews, focus groups, and the countywide community survey) that mentioned the health need as a priority health need. The findings are listed below and displayed in Figure 1.

1. Access to mental/behavioral/substance abuse services
2. Injury and disease prevention and management
3. Access to basic needs such as housing, jobs and food
4. Active living and health eating
5. Access to quality primary care health services
6. Access and functional needs
7. Access to specialty and extended care
8. Safe and violence-free environment
9. Pollution-free living environment
10. Access to dental care and preventive services

This prioritization was based on three measures of community member input. The first measure reports the percentage of key informant interviews or focus groups that mentioned themes associated with a given health need. Key informants and focus group participants were also asked to identify the top three health needs in the area. The second measure reports the percentage of these top three priority health needs identified across all key informant

interviews and focus groups associated with one of the above identified health needs. The final measure came from the community survey, where respondents were asked to identify the top three health issues, individual behaviors, and environmental issues influencing health issues in the community. The top five responses to each of these three questions were identified. The percentage of these responses associated with each of the health needs above was then calculated as the final measure for prioritization. Values for these measures for each of the health needs are shown in Table 1.

Table 1 Community member measures used for health need prioritization

Health Need	Percentage of Key Informants and Focus Groups Identifying Health Need	Percentage of Times Key Informants and Focus Groups Identified Health Need as a Top Three Priority	Percentage of Times Health Need Identified as a Top 5 Priority Health Need in Survey Responses
Access to Mental/ Behavioral/ Substance Abuse Services	100.0%	27.1%	33.3%
Injury and Disease Prevention and Management	100.0%	20.8%	33.3%
Access to Basic Needs such as Housing, Jobs, and Food	100.0%	27.1%	20.0%
Active Living and Healthy Eating	81.8%	6.3%	40.0%
Access to Quality Primary Care Health Services	90.9%	8.3%	13.3%
Access and Functional Needs	90.9%	8.3%	0.0%
Access to Specialty and Extended Care	81.8%	2.1%	6.7%
Safe and Violence- Free Environment	63.6%	0.0%	0.0%
Pollution-Free Living Environment	18.2%	0.0%	20.0%
Access to Dental Care and Preventive Services	54.5%	0.0%	0.0%

Each of these three measures were then rescaled so the health need with the highest value ended up with a value of one, the health need with the lowest value ended up with a value of zero, and all other health needs had values proportional to these. These rescaled values were then summed to create an index that was used to prioritize the health needs. The values for the health need prioritization index are shown in Figure 1.

Yolo County 2019 Prioritized Health Needs

Prioritized Health Needs (y-axis), Prioritization Index Value (x-axis):

- Access to Mental/ Behavioral/ Substance Abuse Services: ~2.85
- Injury and Disease Prevention and Management: ~2.6
- Access to Basic Needs such as Housing, Jobs, and Food: ~2.5
- Active Living and Healthy Eating: ~2.0
- Access to Quality Primary Care Health Services: ~1.5
- Access and Functional Needs: ~1.2
- Access to Specialty and Extended Care: ~1.0
- Safe and Violence-Free Environment: ~0.55
- Pollution-Free Living Environment: ~0.5
- Access to Dental Care and Preventive Services: ~0.45

Figure 1: Prioritized, significant health needs for Yolo County

The significant health needs are described below. Those secondary data indicators used in the CHNA/CHA that performed poorly compared to a benchmark are listed in the table below each of the significant health needs. Qualitative themes that emerged during analysis are also provided in the table, followed by survey questions for which the survey responses compared poorly against standard benchmark comparisons. For a full listing of all quantitative indicators, qualitative themes and survey questions per potential health need refer to the technical report pp. 67-75.

1. Access to Mental, Behavioral, and Substance Abuse Services

Individual health and well-being are inseparable from individual mental and emotional outlook. Coping with daily life stressors is challenging for many people, especially when other social, familial, and economic challenges occur concurrently. Adequate access to mental, behavioral, and substance abuse services helps community members obtain additional support when needed.

Quantitative Indicators	Qualitative Themes	Survey Questions

- Life Expectancy at Birth
- Liver Disease Mortality
- Poor Mental Health Days
- Poor Physical Health Days
- Drug Overdose Deaths
- Excessive Drinking
- Health Professional Shortage Area (HPSA) Mental Health
- Liver Cancer Mortality
	- Lacking in access to appropriate, timely and adequate behavioral/mental health treatment and prevention
	- Lack of mental health resources for the community
	- Many using emergency department (ED) for mental healthcare
	- Lack of psychiatrists in the county
	- High substance abuse issues in the county
	   o Alcohol, meth, and opioid usage
	   o Opioid on the rise in the last few years
	- Substance abuse and homelessness in the county
	- High presence of homelessness in Woodland, Davis, West Sac, and by the river
	- Hard to find housing for individuals who are mentally ill and homeless
	- Lack of prevention and early intervention work for mental health
	- Lack of support for adults as parents directly impacting the children in the family
	- Need for mental healthcare and support for the aging population – struggle with anxiety and depression – become "shut-ins"
	- Need community opportunities to stay connected for the aging population and the community in general
	- Need support for dementia caregivers and other caregivers (mental health, etc.)
	- Need mental health day-care programs
	- Increased access to care for mental health and substance abuse treatment as a Medi-Cal enrollee
		- Have you ever been told you have cancer?
		- Have you ever been told you have mental illness?
		- Have you ever been told you have a drug or alcohol problem?
		- Have you needed behavioral health care in past 12 months?

2. Injury and Disease Prevention and Management

Knowledge is important for individual health and well-being, and efforts aimed at prevention are powerful vehicles to improve community health. When community residents lack adequate information on how to prevent, manage, and control their health conditions, those conditions tend to worsen. Prevention efforts focused on reducing cases of injury and around infectious disease control (e.g., sexually transmitted infection (STI) prevention, influenza shots) and intensive strategies around the management of chronic diseases (e.g., diabetes, hypertension, obesity, and heart disease) are important for community health improvement.

Quantitative Indicators	Qualitative Themes	Survey Questions
- Alzheimer's Mortality - Chronic Lung Disease (CLD) Mortality - Diabetes Mortality - Liver Disease Mortality - Unintentional Injury Mortality - Drug Overdose Deaths - Excessive Drinking - Adult Obesity - Adult Smokers - Motor Vehicle Crash Deaths - Prenatal Care - Liver Cancer Mortality - ED visits for Falls Persons over age 65	- Prevention efforts for chronic disease especially diabetes and obesity - Assistance understanding and navigating community resources before crisis - Prevention of STIs - Prevention of cannabis smoking, especially in youth and pregnant mothers - Need senior services – day-care centers, resources for medication management, preventing isolation, fall prevention, Alzheimer's, and dementia prevention - Fear of accessing community preventive services in the undocumented population - Access to fresh fruits and vegetables to live healthfully - Lack of a resource team for early detection of social needs in youth - West Sac isolated from county hub – hard to get many county-based preventive programs - Over usage of the ED for primary care – focus should be on prevention - Increased awareness needed regarding dating violence	- Have you ever been told you have asthma/lung disease/Chronic Obstructive Pulmonary Disease (COPD)/emphysema? - Have you ever been told you have an autoimmune disease (Lupus, Type 1 diabetes)? - Have you ever been told you have cancer? - Have you ever been told you have diabetes? - Have you ever been told you have mental illness? - Have you ever been told you have a drug or alcohol problem?

3. Access to Basic Needs, Such as Housing, Jobs, and Food

Access to affordable and clean housing, stable employment, quality education, and adequate food for good health are vital for survival. Maslow's Hierarchy of Needs[4] says that only when people have their basic physiological and safety needs met can they become engaged members of society and self-actualize or live to their fullest potential, including enjoying good health.

Quantitative Indicators	Qualitative Themes	Survey Questions

- **Premature Age-Adjusted Mortality**
- **Years of Potential Life Lost**
- **HPSA Medically Underserved Area**
- **Unemployment Rate**
- **Median Household Income**
- **Housing Units with No Vehicle**
- **Third-Grade Reading Level**
	- Lack of affordable housing
	- Low housing inventory in the county
	- Lack of employment opportunities in the county
	- Homelessness in adults, especially veterans, and teens
	- Food insecurity and obesity
	- Lack of affordable child care – dual-income families due to high housing and living costs
	- Limited food banks
	- Businesses closing – vacant lots and buildings
	- Lack of housing drastically increasing homelessness in the county, displacing many seniors
	    o Much of the new housing geared at families who are not low-income or seniors on fixed incomes.
	    o "Not in my backyard" mentality
	- Drastic lack of services for migrants in rural areas of county – Knights Landing, Esparto, Madison, Winters
	- High amount of poverty in areas of the county
	- Presence of youth sex workers in the county
	- Need overall safety-net services for families
		- Have you ever been told you have asthma/lung disease/COPD/emphysema?
		- Do you have health insurance?

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[4] McLeod, S. (2014). *Maslow's Hierarchy of Needs*. Retrieved from: http://www.simplypsychology.org/maslow.html

4. Active Living and Healthy Eating

Physical activity and eating a healthy diet are extremely important for one's overall health and well-being. Frequent physical activity is vital for prevention of disease and maintenance of a strong and healthy heart and mind. When access to healthy foods is challenging for community residents, many turn to unhealthy foods that are convenient, affordable, and readily available. Communities experiencing social vulnerability and poor health outcomes are often overloaded with fast food and other establishments where unhealthy food is sold.

Quantitative Indicators	Qualitative Themes	Survey Questions
- **Diabetes Mortality** - **Cancer Female Breast** - **Adult Obesity**	- Food insecurity issues - Lack of grocery stores and access to affordable high-quality foods - Limited food banks in the county - Much of what is available too high in sodium, fat, sugar, and chemicals - Contributes to high rates of diabetes, obesity, and youth obesity - Parks for physical activity have many individuals with mental illness or experiencing homelessness – creates perception of being unsafe - Sports and organized activities for youth too expensive - Food deserts – Woodland, Winters, and West Sacramento	- Have you ever been told you have cancer? - Have you ever been told you have diabetes?

5. Access to Quality Primary Care Health Services

Primary care resources include community clinics, pediatricians, family practice physicians, internists, nurse practitioners, pharmacists, telephone advice nurses, and similar. Primary care services are typically the first point of contact when an individual seeks healthcare. These services are the front line in the prevention and treatment of common diseases and injuries in a community.

Quantitative Indicators	Qualitative Themes	Survey Questions
- **Life Expectancy at Birth** - **CLD Mortality** - **Diabetes Mortality** - **Liver Disease Mortality** - **Cancer Female Breast** - **HPSA Medically Underserved Area** - **Prenatal Care** - **Liver Cancer Mortality**	- Lack of access to care - Need timely care at the local health clinics, area clinics are full – sometimes a week or more for an appt. o The "hurry up and wait" game - Transportation to care a major barrier - Overuse of ED for primary care appointments - Lack of integration of care between major county hubs – Woodland, West Sacramento, and Davis - Medication management and cost of medication is unaffordable - Need more medical caseworkers – basic needs a big barrier to primary care access - Need for trauma-informed care at the primary care level - Language and cultural barriers to primary care access and quality - Hesitation of local primary care providers (esp. at local community clinics) to work on "pain management" cases due to opioid epidemic - Need more patient navigation – especially for seniors - Lacking 24/7 pharmacies in Yolo County - Constant changes to government-funded care creates barriers to care	- Have you ever been told you have cancer? - Have you ever been told you have diabetes? - Have you ever gone to the ER because it was more convenient?

6. Access and Functional Needs – Transportation and Physical Disability

The sixth-highest-priority significant health need for Yolo County was access to meeting functional needs, which includes indicators related to transportation and disability. Having access to transportation services to support individual mobility is a necessity of daily life. Without transportation, individuals struggle to meet their basic needs, including those that promote and support a healthy life. Examining the number of people that have a disability is also an important indicator for community health in an effort to assure that all community members have access to necessities for a high quality of life.

Quantitative Indicators	Qualitative Themes	Survey Questions
- **Housing Units with No Vehicle**	- Lack of adequate and affordable transportation a major issue in the county - Medical care services not organized around major transportation lines - Outlying rural areas lack access to services and healthy food – including transportation - For seniors – helping assist with navigation of the transportation system, and helping reduce fear of using public transportation - Lack of transportation causing increased isolation - Hard to get primary care appointments - – patients use ambulances to get to appointments - Lack of transportation primary reason given for missing medical appointments	- Have you ever been told you have a physical disability?

7. Access to Specialty and Extended Care

Specialty care is devoted to a particular branch of medicine and often focuses on the treatment of a particular disease. Primary and specialty care go hand-in-hand, and without access to specialists such as endocrinologists, cardiologists, and gastroenterologists, community residents are left to manage chronic diseases such as diabetes and high blood pressure on their own. In addition to specialty care, extended care refers to care needed in the community that supports overall physical health and wellness and that extends beyond primary care services, such as skilled nursing facilities, hospice care, in-home healthcare, and the like.

Quantitative Indicators	Qualitative Themes	Survey Questions

- **Life Expectancy at Birth**
- **Alzheimer's Mortality**
- **CLD Mortality**
- **Diabetes Mortality**
- **Liver Disease Mortality**
- **Liver Cancer Mortality**
	- Lack of specialty care and testing centers (labs) in the county
	- Lack of specialty care providers for diabetes care, especially dialysis centers in the county
	- Disconnect between hospital and post- discharge care to prevent readmissions
	   o Need vocational care
	   o Need home care
	- Transportation major issue for access to specialty care with patients having to travel to major hubs of the county or outside the county for services
	   o Kaiser patients must drive outside of the county for specialty care
	- Long-term dementia care is needed
	- Need board and care homes for seniors
	- Homeless hospice care needed
	- Lack of palliative care programs in the county
	- Shortage of vision and dental providers for Medi-Cal patients
		- Have you ever been told you have cancer?
		- Have you ever been told you have diabetes?

8. Safe and Violence-Free Environment

Feeling safe in one's home and community are fundamental to overall health. Next to having basic needs met (e.g., food, shelter, clothing) is physical safety. Feeling unsafe affects, the way people act and react to everyday life occurrences and can have significant negative impacts on physical and mental wellbeing.[5]

Quantitative Indicators	Qualitative Themes	Survey Questions
- **Life Expectancy at Birth** - **Motor Vehicle Crash Deaths** - **Poor Mental Health Days** - **Hospitalizations due to Self-Inflicted Injuries Youth**	- Countywide community violence issues - Commercially and sexually exploited youth - Human trafficking - Child neglect - Gang and youth violence visible in the county - High presence of vandalism, graffiti	- Have you ever been told you have a drug or alcohol problem? - Have you ever been told you have mental illness?

9. Pollution-Free Living Environment

Living in a pollution-free environment is essential for health. Individual health is determined by a number of factors, and some models show that one's living environment, including the physical (natural and built) and sociocultural environment, has more impact on individual health than one's lifestyle, heredity, or access to medical services.[6]

Quantitative Indicators	Qualitative Themes	Survey Questions
- CLD Mortality - Cancer Female Breast - Adult Smokers - Air Particulate Matter - Drinking Water Violations	- Smoking rates for tobacco were decreasing but now on the rise - Cannabis usage a major issue in the county - Impact by area fires especially in Winters/Guinda - Air quality issues due to pesticide usage – high asthma rates o Especially true in migrant farm workers' areas	- Have you ever been told you have asthma/lung disease/COPD/emphysema? - Have you ever been told you have cancer?

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[5] Lynn-Whaley, J., & Sugarmann, J. (July 2017). *The Relationship Between Community Violence and Trauma*. Los Angeles: Violence Policy Center.

[6] See Blum, H. L. (1983). *Planning for Health*. New York: Human Sciences Press

10. Access to Dental Care and Prevention

Oral health is important for overall quality of life. When individuals have dental pain, it is difficult to eat, concentrate, and fully engage in life. Poor oral health impacts the health of the entire body, especially the heart and the digestive and endocrine systems.

Quantitative Indicators	Qualitative Themes	Survey Questions
- **Dentists per Population**	- Lack of Denti-Cal (Medi-Cal) providers in the county - Lack of providers results in pulling of teeth during dental emergencies - Many people needing dental care cannot wait and seek care in ED - Access especially lacking in outlying rural areas	- Have you been to a dentist in the last 12 months?

Health Disparities: Populations and Locations

A health disparity is defined as "preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health experienced by populations, and defined by factors such as race or ethnicity, gender, education or income, disability, geographic location or sexual orientation." [7] The figure and table below describe populations and geographical locations in Yolo County identified via qualitative data collection that were indicated as experiencing health disparities.

Interview participants were asked two separate questions:
1. What specific groups of community members experience health issues the most?
2. What specific geographic locations struggle with health issues the most?

Interview results were analyzed by counting the total number of times all key informants and focus group participants mentioned a particular group as one experiencing disparities. Figure 2 displays the results of this analysis. In addition, locations consistently mentioned by participants as being disproportionately affected by disparities were also noted and are detailed in alphabetical order in Table 2.

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[7] Modified from: Center for Disease Control and Prevention. (2008) Community Health and Program Services (CHAPS): Health Disparities Among Racial/Ethnic Populations. Atlanta: U.S. Department of Health and Human Service.
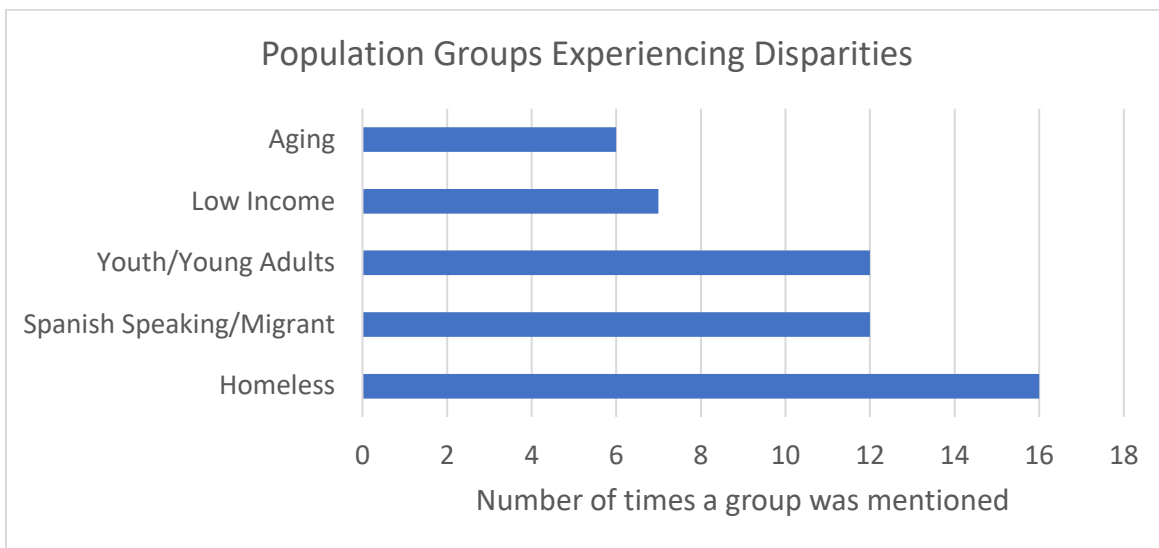
Figure 2: Specific populations experiencing health disparities for Yolo County

Other population groups mentioned included Russian and rural communities, families struggling with domestic violence, those struggling with substance abuse, and tribal community members.

Table 2 displays geographic locations across Yolo County mentioned as areas of the county experiencing social and health disparities. Data presented was collected from key informant interviews where participants were asked to identify and describe areas of the county where disparities existed by location. In most cases, participants were provided with a map of the county to draw and write on for recording the detailed data contained in Table 2. The attributes in Table 2 come directly from the written maps or key informant interview notes.

Table 2: Geographic Locations Experiencing Disparities

What specific geographic locations struggle with health issues the most?	
Geographic Locations	**Attributes of Locations**
Davis	Homelessness, substance abuse treatment needed, domestic violence, lack of affordable housing, adult day-care services needed, high sexually transmitted diseases (STD)/sexually transmitted infections (STI) rates, widespread financial insecurity, disparities in income among community groups
Dunnigan	Lack of access to social and health services, especially healthcare access, transportation issues, low socioeconomic status (SES), transportation barriers to accessing services, large aging population, high prevalence of substance abuse, lack of adequate housing, high prevalence of smoking and unhealthy eating, isolation
Esparto/Madison	High prevalence of obesity, large Spanish-speaking population, large migrant population, migrant camps, need for transportation, lacking access to food
Guinda	Low-income, many homebound residents, tribal communities, rural area of county, high rates of food insecurity, lack of prenatal services, isolation, area greatly impacted by fires

Knights Landing	Large Spanish-speaking population, low socioeconomic status, lack of access to care, need for transportation, isolation, language barriers for care
West Sacramento	Highly diverse area with a large Russian-speaking population, high lung cancer rate, widespread homelessness, especially along the river, mental health issues, substance abuse (methamphetamine), many child maltreatment cases, poverty, large recent-immigrant population, lack of choices for healthcare, food desert, lack of adequate transportation, no hospital for care
Winters	Large Spanish-speaking population, few services available, large migrant population, migrant camps, isolation, impacted by fires
Woodland	Prevalence of STD/STIs, homelessness, lower income, lack of access to care, high prevalence of substance abuse issues, large aging population, teen dating violence, teen pregnancy, HIV, child abuse and sexual assault, high obesity rates, diabetes, lack of access to healthy foods in many areas, need for transportation to access services, need for stronger safety-net systems for families, low SES and urban poverty, need services for the aging population

Communities of Concern

Communities of Concern are geographic areas within the county that have the greatest concentration of poor health outcomes and are home to more medically underserved, low-income, and diverse populations at greater risk for poorer health. Communities of Concern are important to the overall CHNA/CHA methodology because, after the county has been assessed more broadly, they allow for a focus on those portions of the county likely experiencing the greatest health disparities.

Geographic Communities of Concern were identified using a combination of primary and secondary data sources. A general description of this process is provided here. (refer to the technical section of this report for an in-depth description). Three secondary data factors were considered in determining if ZIP Codes within the service area would be identified as geographic Communities of Concern: 1) whether they were identified as Communities of Concern in the 2016 CHNA, 2) if they intersected census tracts with the highest 20% of Community Healthy Vulnerability Index (CHVI) scores in the service area, and 3) if they consistently had among the highest mortality indicator values in the county. ZIP Codes with any of these three criteria were combined with the list of geographic locations consistently mentioned in initial area-wide primary data (detailed in Table 2) to result in a final set of geographic Communities of Concern. (Population experiencing disparities were identified based on the results of primary data and were detailed previously in Figure 2).

Analysis of both primary and secondary data revealed seven ZIP Codes that met the criteria to be classified as Communities of Concern. Four ZIP Codes were identified as primary Communities of Concern, while three ZIP Codes were identified as secondary. These three ZIP Codes were labeled as secondary Communities of Concern for two reasons: 1) they were identified by local experts of geographic areas of the county with vulnerable populations and 2) they have small population census counts. These are noted in Table 2, with the census population provided for each, and they are displayed in Figure 3.

Table 3: Identified Communities of Concern for Yolo County

ZIP Code	Community/Area	Population
Primary Communities of Concern		
95605	West Sacramento	14,677
95691	West Sacramento	37,743
95695	Woodland	40,121
95776	Woodland	23,169
Secondary Communities of Concern		
95627	Esparto	3,892
95645	Knights Landing	1,810
95653	Madison	7,27
Total Population in Communities of Concern		122,139
Total Population in Yolo County*		214,481
Percentage of Yolo County*		57%

*County population used here is the total population of the ZIP codes included in the analysis (95605, 95606, 95607, 95612, 95616, 95618, 95627, 95637, 95645, 95653, 95679, 95691, 95694, 95695, 95697, 95698, 95776, 95937); Total estimated population for the county itself was 212,605 for the same time period. (Source: 2013–2017 American Community Survey 5-year estimates; U.S. Census Bureau)

Figure 3 displays the ZIP Codes that are Communities of Concern for Yolo County. ZIP Codes in pink are primary Communities of Concern, while ZIP Codes in blue are secondary.
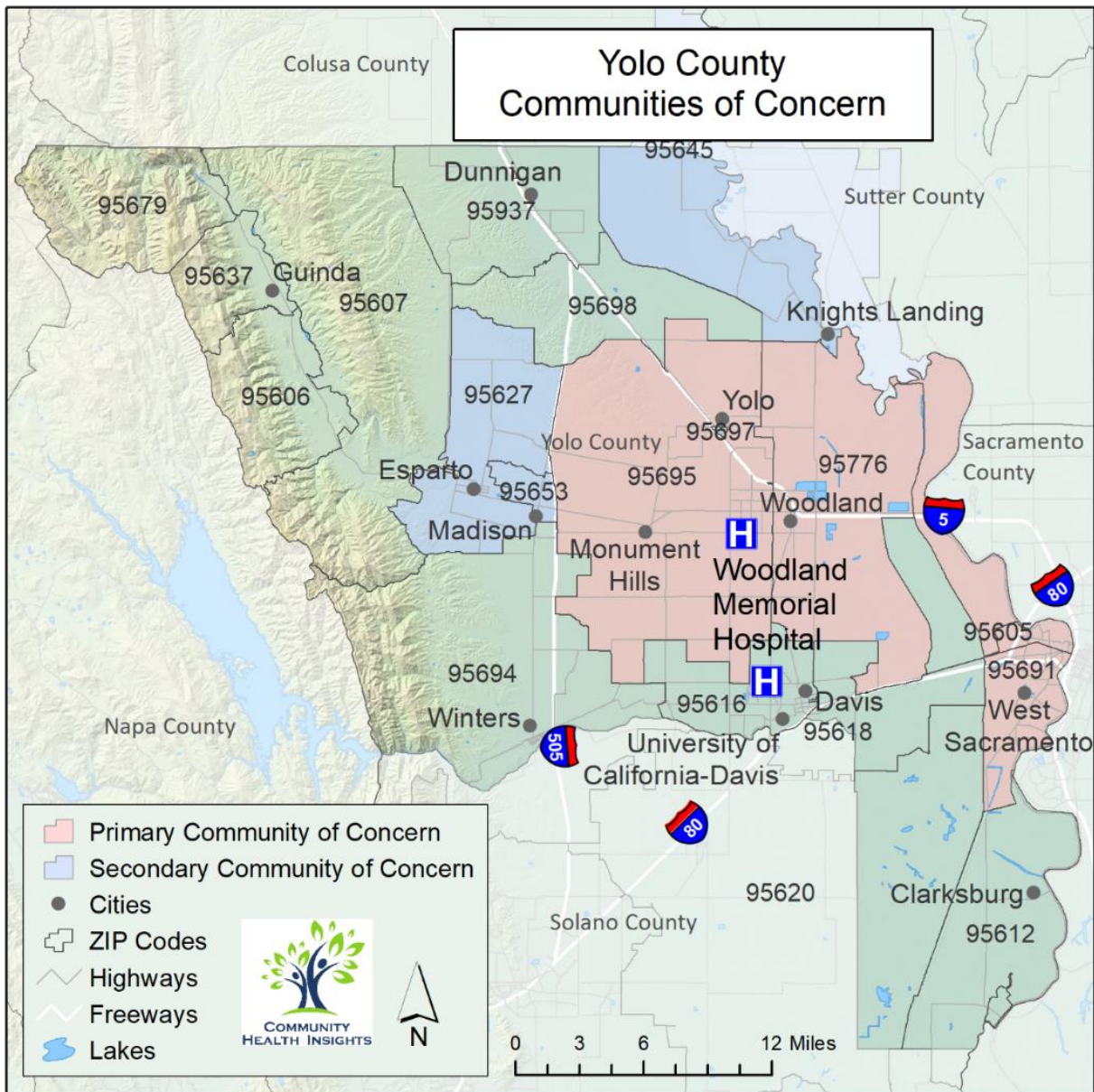
Figure 3: Communities of Concern for Yolo County

Method Overview

Conceptual and Process Models

The data used to conduct the CHNA/CHA were identified and organized using the widely recognized Robert Wood Johnson Foundation's County Health Rankings model.[8] This model of population health includes many factors that impact and account for individual health and well-being. Furthermore, to guide the overall process of conducting the assessment, a defined set of data-collection and analytic stages were developed. For a detailed overview of methods, see the technical section (pp. 32-89).

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[8] See http://www.countyhealthrankings.org/

Public Comments from Previously Conducted CHNAs

Regulations require that nonprofit hospitals include written comments from the public on their previously conducted CHNAs and most recently adopted implementation strategies. Both Sutter Davis and Woodland Memorial Hospital requested written comments from the public on its 2016 CHNA and implementation strategy via their respective websites. No public comments were given in relation to the 2016 CHNA and implementation strategy for either hospital.

Data Used in the CHNA/CHA

Data collected and analyzed included both primary and secondary data. Primary data included eight interviews with 61 community health experts as well as three focus groups conducted with a total of 32 community residents. In addition, a countywide survey was conducted with 2,291 responses from Yolo County residents (detail of CHNA/CHA participants can be seen in the technical section of this report).

Secondary data included four datasets selected for use in the various stages of the analysis. A combination of mortality and socioeconomic datasets collected at sub-county levels were used to identify portions of Yolo County with greater concentrations of disadvantaged populations and poor health outcomes. A set of county-level indicators was collected from various sources to help identify and prioritize significant health needs. A set of socioeconomic indicators was also collected to help describe the overall social conditions within the service area. Health-outcome indicators included measures of both mortality (length of life) and morbidity (quality of life). Health-factor indicators included measures of 1) health behaviors, such as diet and exercise, tobacco, alcohol, and drug use; 2) clinical care, including access and quality of care; 3) social and economic factors such as race/ethnicity, income, educational attainment, employment, neighborhood safety, and similar; and 4) the physical environment measures, such as air and water quality, transit and mobility resources, and housing affordability. In all, 84 different health-outcome and health-factor indicators were collected for the CHNA/CHA.

Data Analysis

Primary and secondary data were analyzed to identify and prioritize the significant health needs within Yolo County. This began by identifying 10 potential health needs (PHNs). These PHNs were those identified in the previously conducted CHNAs for the two area hospitals (not previous CHAs). Data were analyzed to discover which, if any, of the PHNs were present in the area. After these were identified, PHNs were prioritized based on an analysis of primary data sources that described the PHN as a significant health need.

For an in-depth description of the processes and methods used to conduct the CHNA/CHA, including primary and secondary data collection, analysis, and results, see the technical section of this report (pp. 32-89).

Description of Community Served

Yolo County, California, is located northwest of Sacramento along the Interstate 5 corridor and includes both urban and rural communities. The City of Woodland is the county seat of Yolo County. Community service providers and community members described Yolo County during primary data collection for the CHNA/CHA as "diverse in income, race/ethnicity, and rural and urban status" with many "longtime county residents." A map of Yolo County is shown in Figure 4. Yolo County was selected as the geographical area for the CHNA/CHA because it is the

statutory service area of the public health department and the primary service area of the two hospitals participating in the joint assessment.
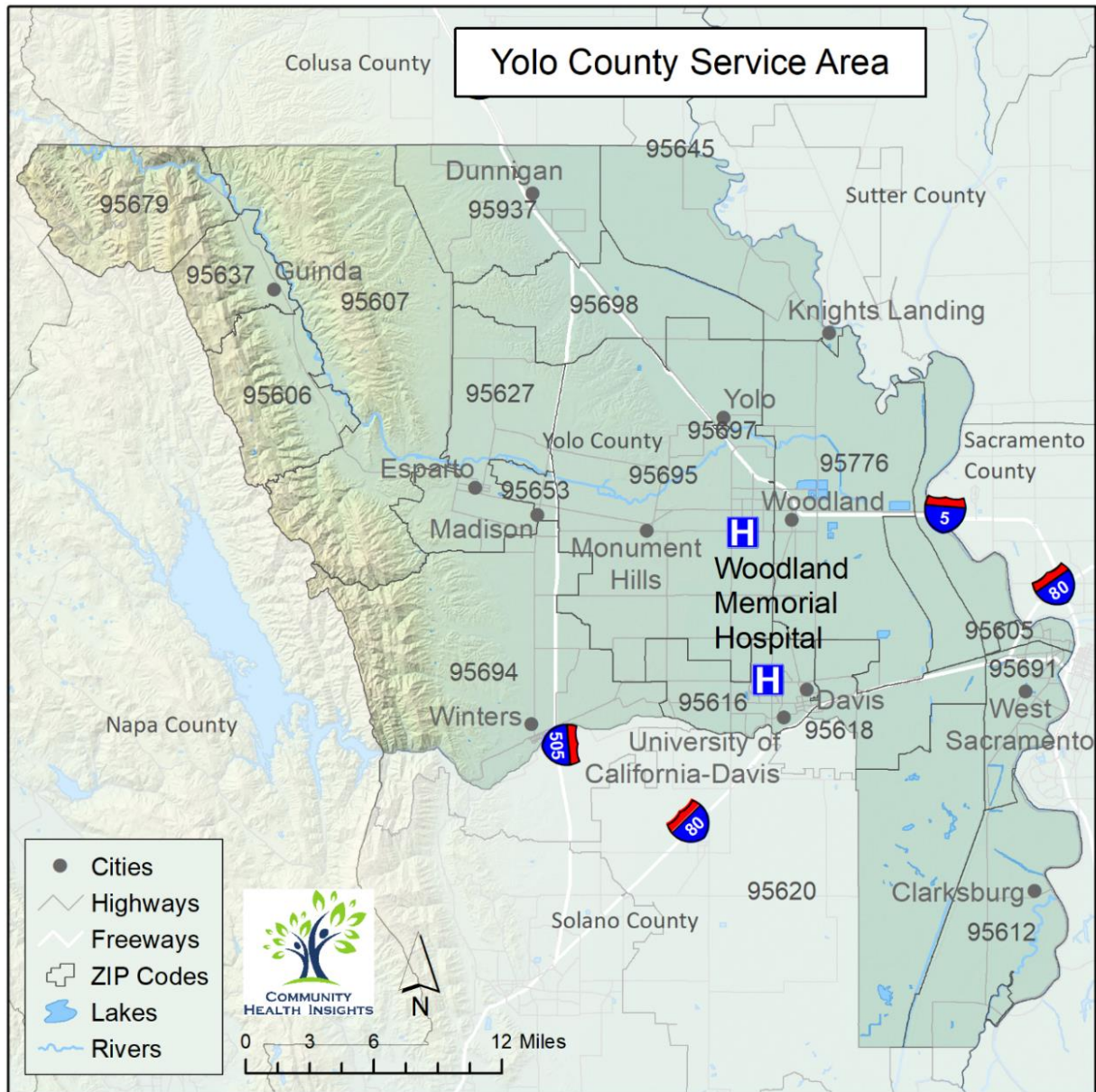
Figure 4: Yolo County service area

Population characteristics for each ZIP Code in Yolo County are presented in Table 4. The data provided below help give a deep understanding of how the county's communities differ based on various social determinants of health. Data provided are compared to the state and county rates, and ZIP Codes that deviated when compared to the county benchmark are highlighted. Cells where ZIP Code data were not available are denoted with a double hash mark (--).

Table 4: Population characteristics for each ZIP Code in Yolo County

ZIP Code	Total Population	% Minority	Median Age	Median Income	% Poverty	% Unemployed	% Uninsured	% No HS Graduation	% Living in High Housing Costs	% with Disability
95605	14,595	60.4%	31.7	$42,266	22.6%	14.9%	14.1%	25.7%	45.0%	16.4%
95606	129	66.7%	47.8	--	27.9%	13.8%	0.0%	19.4%	0.0%	38.0%
95607	499	29.3%	59.3	$70,038	10.2%	8.2%	10.6%	11.9%	14.3%	10.8%
95612	964	34.5%	41.5	$72,863	5.1%	0.9%	3.1%	3.3%	18.4%	10.4%
95616	49,093	46.8%	23.3	$46,170	33.9%	6.3%	5.8%	3.2%	44.9%	6.1%
95618	27,926	43.9%	29.2	$81,382	22.2%	5.3%	4.3%	3.8%	39.0%	6.2%
95620	21,685	51.8%	34.4	$72,583	13.7%	8.6%	9.8%	22.0%	37.4%	9.8%
95627	3,873	58.9%	33.1	$58,796	10.8%	8.8%	9.3%	24.1%	28.5%	13.8%
95637	349	69.6%	33.3	$51,641	29.5%	14.2%	0.0%	15.3%	46.3%	8.6%
95645	2,091	66.2%	34.0	$38,917	21.6%	12.6%	16.1%	36.6%	49.0%	13.8%
95653	657	82.3%	41.3	$68,750	3.2%	23.4%	19.3%	29.5%	24.7%	20.9%
95679	20	0.0%	--	--	0.0%	--	0.0%	0.0%	0.0%	50.0%
95691	36,932	49.7%	34.5	$66,519	13.7%	7.7%	10.0%	13.1%	38.7%	11.7%
95694	9,828	51.4%	38.8	$62,083	8.9%	9.8%	14.5%	23.0%	34.5%	10.2%
95695	39,144	51.2%	38.5	$55,386	12.4%	9.7%	12.2%	18.7%	36.4%	14.2%
95697	430	80.9%	35.2	$75,708	8.1%	4.3%	17.9%	22.0%	6.8%	19.3%
95698	232	32.8%	45.8	$38,984	5.6%	0.0%	0.0%	34.2%	21.0%	13.4%
95776	23,260	66.2%	30.6	$66,870	13.5%	5.9%	12.6%	21.3%	39.6%	8.0%
95937	1,400	67.7%	40.2	$50,824	14.0%	14.4%	8.4%	24.9%	31.9%	19.2%
Yolo County	209,671	51.9%	30.9	$57,663	19.3%	7.9%	9.4%	14.4%	39.5%	10.1%
California	38,654,206	61.6%	36.0	$63,783	15.8%	8.7%	12.6%	17.9%	42.9%	10.6%

(Source: 2012–2016 American Community Survey 5-year estimates; U.S. Census Bureau)

Community Health Needs Index

Figure 5 displays the Community Health Needs Index (CHVI) for Yolo County. The CHVI is a composite index used to help explain the distribution of health disparities within the county. Like the Community Need Index or CNI[9] on which it was based, the CHVI combines multiple sociodemographic indicators to help identify those locations experiencing health disparities (displayed in Table 5). CHVI values indicate a greater concentration of groups supported in the literature as being more likely to experience health-related disparities (refer to the technical section of this report for further details as to the CHVI construction). CHVI indicators are as follows:

Table 5: Community Health Vulnerability Index indicators

Percentage Minority (Hispanic or Nonwhite)	Percentage Families with Children in Poverty
Percentage 5 Years or Older Who Speak Limited English	Percentage Households 65 Years or Older in Poverty
Percentage 25 or Older Without a High School Diploma	Percentage Single Female-Headed Households in Poverty
Percentage Unemployed	Percentage Renters
Percentage Uninsured	

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[9] Barsi, E. and Roth, R. (2005) The Community Need Index. *Health Progress*, Vol. 86, No. 4, pp. 32–38.
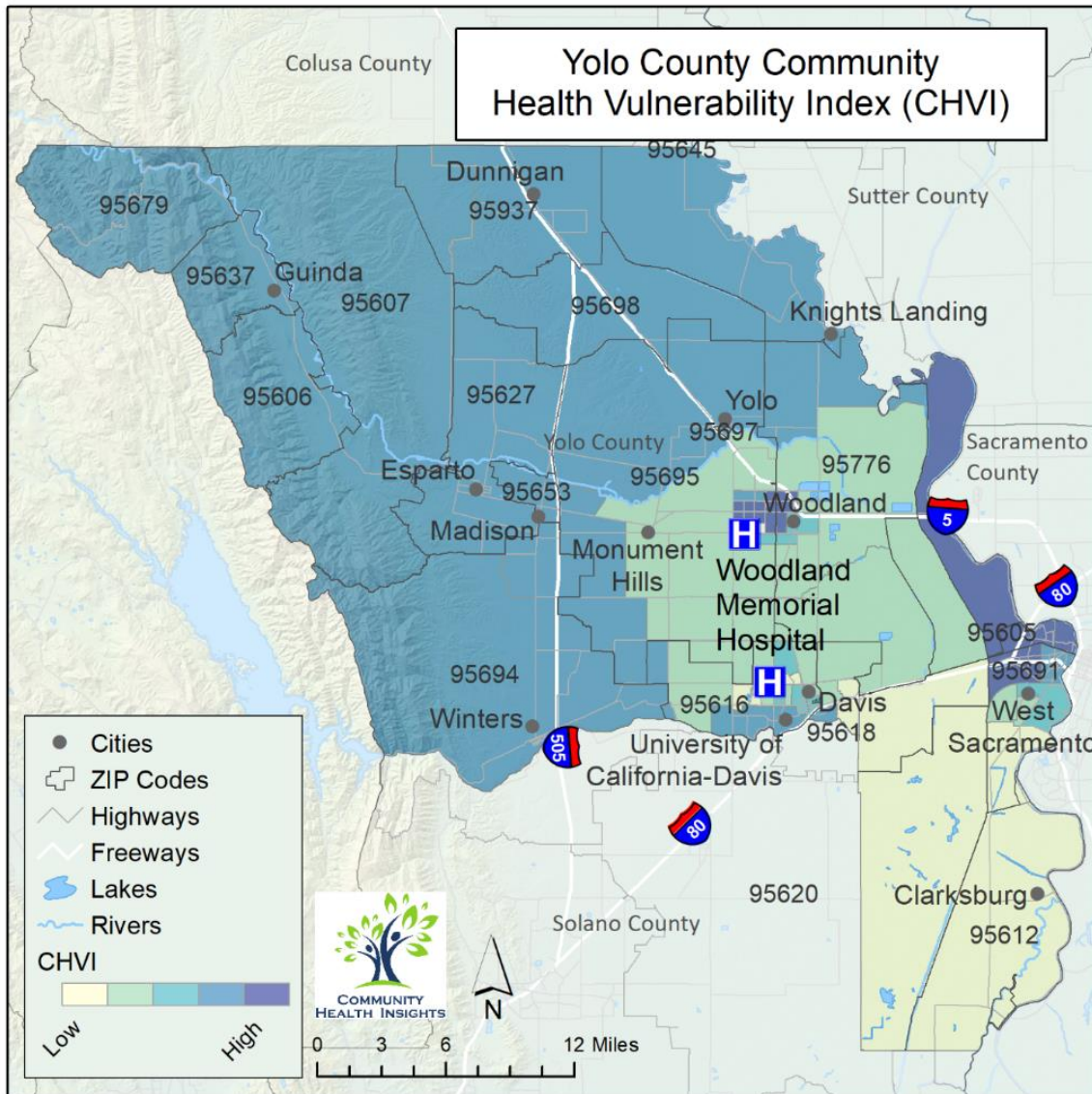
Figure 5: Community Health Vulnerability Index (CHVI) for Yolo County

The census tracts with the highest overall CHVI scores (greatest vulnerability) included the main area of central Woodland, the area of West Sacramento that follows the Sacramento River north, and portions of the City of Davis[10]. Further, outlying rural areas in the northwestern portion of the county also had high CHVI scores.

Resources Potentially Available to Meet the SHNs

In all, 292 resources were identified in the Yolo County area that were potentially available to meet the identified significant health needs. The identification method included starting with the list of resources from the 2016 hospital-based CHNAs, verifying that the resource still existed, and then adding newly identified resources into the 2019 CHNA/CHA report. Examination of the resources revealed the following numbers of resources for each significant health need as shown in Table 6. For more specific examination of resources by significant

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[10] The City of Davis includes many college students (approximately 40,000) which could make data related to poverty upwardly skewed.

health need and by geographic locations, as well as the detailed method for identifying these, see the technical section.

Table 6: Resources potentially available to meet significant health needs in priority order for Yolo County

Significant Health Need (in priority order)	Number of Resources
Access to mental/behavioral/substance abuse services	48
Injury- and disease-prevention and management	18
Access to basic needs such as housing, jobs, and food	77
Access to active living and healthy eating	32
Access to quality primary healthcare services	42
Access to meeting functional needs (transportation and physical mobility)	11
Access to specialty and extended care	19
Safe and violence-free environment	36
Pollution-free living environment	4
Access to dental care and preventive services	5

Conclusion

This joint CHNA/CHA report details the needs of the Yolo County community as a part of a successful collaborative partnership between Sutter Davis Hospital, Woodland Memorial Hospital, and Yolo County Health and Human Services Community Health Branch. It provides both an overall health and social examination of Yolo County, as well as a deeper examination of the needs of community members living within areas of the county experiencing disproportionate burdens. The work provides a comprehensive profile to guide decision-making for implementation of community health improvement efforts. This report also serves as an example of a successful collaboration between local healthcare systems and county public health to not only meet state and federal reporting/accreditation requirements but also provide meaningful insights to support improved health in the community they serve.

Appendix A: Yolo County 2019 CHNA/CHA Technical Section

The following section presents a detailed account of data collection analysis, and results, as well as appendices to the CHNA/CHA report for Yolo County.

Results of Data Analysis for Yolo County

Secondary Data

The tables and figures that follow show the specific values for the health need indicators used as part of the health need identification process. *(NOTE: References for tables 7-12 and figures 6-11 are contained in Table 18 on pp. 55-58.) Each* indicator value for Yolo County was compared to the California state benchmark. Indicators where performance was worse in the county versus the state are highlighted. Table 13 gives the values for survey questions used in health need identification, with relevant benchmarks. Questions with responses indicating issues in benchmark comparison are in orange.

Length of Life

Table 7: Length Of Life Indicators Compared To State Benchmarks

Indicators	Description	Yolo	California
Early Life			
Infant Mortality	Infant deaths per 1,000 live births	4.1	4.5
Preterm Birth	Percent of births Preterm (<37 weeks)	9.5	20.2
Child Mortality	Deaths among children under age 18 per 100,000	38.0	38.5
Overall			
Life Expectancy	Life expectancy at birth in years	80.6	80.8
Age-Adjusted Mortality	Age-adjusted deaths per 100,000	649.1	608.5
Premature Age-Adjusted Mortality	Age-adjusted deaths among residents under age 75 per 100,000	273.9	268.8
Years of Potential Life Lost	Age-adjusted years of potential life lost before age 75 per 100,000	5,383.6	5,217.3
Cancer, Liver, and Kidney Disease			
Liver Disease Mortality	Deaths per 100,000	14.1	13.2
Cancer Mortality	Deaths per 100,000	141.2	153.4
Kidney Disease Mortality	Deaths per 100,000	3.7	8.3
Other			
Alzheimer's Mortality	Deaths per 100,000	38.9	35.0
Influenza Pneumonia Mortality	Deaths per 100,000	13.5	16.0
Chronic Disease			
Stroke Mortality	Deaths per 100,000	35.0	37.5
CLD Mortality	Deaths per 100,000	40.5	34.9
Diabetes Mortality	Deaths per 100,000	22.4	22.1
Heart Disease Mortality	Deaths per 100,000	127.8	157.3
Hypertension Mortality	Deaths per 100,000	11.8	12.6

Intentional and Unintentional Injuries			
Suicide Mortality	Deaths per 100,000	10.6	10.8
Unintentional Injury Mortality	Deaths per 100,000	35.4	31.2

Length of Life

■ Yolo County Rate   ■ Yolo County Rate (Poor Performing)   ● California Rate

Early Life

Infant Mortality	4.1 ● 4.5
Preterm Birth	9.5 ● 20.2
Child Mortality	38.0 ● 38.5

Overall

Life Expectancy	80.6 ● 80.8
Age-Adjusted Mortality	649.1 ● 608.5
Premature Age-Adjusted Mortality	273.9 ● 268.8
Years of Potential Life Lost	5,383.6 ● 5,217.3

Cancer, Liver, and Kidney Disease

Liver Disease Mortality	14.1 ● 13.2
Cancer Mortality	141.2 ● 153.4
Kidney Disease Mortality	3.7 ● 8.3

Other

Alzheimer's Mortality	38.9 ● 35.0
Influenza Pneumonia Mortality	13.5 ● 16.0

Chronic Disease

Stroke Mortality	35.0 ● 37.5
CLD Mortality	40.5 ● 34.9
Diabetes Mortality	22.4 ● 22.1
Heart Disease Mortality	127.8 ● 157.3
Hypertension Mortality	11.8 ● 12.6

Intentional and Unintentional Injuries

Suicide Mortality	10.6 ● 10.8
Unintentional Injury Mortality	35.4 ● 31.2

Figure 6: Length of life indicators

Quality of Life

Table 8: Quality Of Life Indicator Compared To State Benchmarks

Indicators	Description	Yolo	California
Chronic Disease			
ED Asthma	Percentage population reporting ED or urgent care visits for asthma in the past 12 months	0.8%	12.7%
Hospitalizations for Diabetes Long Term Complications	Age-sex-adjusted hospitalization rate for long-term complications due to diabetes per 100,000	49.4	79.8
Percentage with Disability	Percentage of total civilian noninstitutionalized population with a disability	10.1%	10.6%
Diabetes Prevalence	Percentage age 20 and older with diagnosed diabetes	6.9%	8.5%
HIV Prevalence	Persons age 13 or older with a(n) Human Immunodeficiency Virus (HIV) infection per 100,000	121.5	376.4
Low Birth Weight	Percent of live births with birthweight below 2500 grams	5.8	6.8
Mental Health			
Hospitalizations for Mental Health or Substance Abuse	Hospitalizations for mental health or alcohol- or drug-related diagnoses per 100,000	612.3	676.1
Hospitalizations for Self-Inflicted Injuries Youth	Non-fatal hospitalizations for self-inflicted injury for persons aged 15-14 per 100,000	41.5	25.3
Hospitalizations for Mental Health Young Adults	Hospitalizations for Mental Health (MDC 19) for persons aged 15-24 per 100,000	694.1	908.6
Poor Mental Health Days	Age-adjusted average number of mentally unhealthy days reported in past 30 days	3.8	3.5
Poor Physical Health Days	Age-adjusted average number of physically unhealthy days reported in past 30 days	3.7	3.5
Cancer			
Cancer Female Breast	Age-adjusted incidence per 100,000	128.8	120.6
Cancer Colon and Rectum	Age-adjusted incidence per 100,000	33.1	37.1
Cancer Lung and Bronchus	Age-adjusted incidence per 100,000	43.3	44.6
Cancer Prostate	Age-adjusted incidence per 100,000	96.5	109.2
Cancer Liver	Age-adjusted incidence per 100,000	13.7	9.4
Cancer Colon Hospitalizations	Hospitalizations for with colon cancer as the primary diagnosis per 100,000	18.4	23.1
Falls			
ED Falls Aged 65+	Emergency department visits for persons age 65 or older for accidental falls per 100,000	5,125.8	4,276.9
Hospitalizations for Falls Aged 65+	Hospitalizations for persons age 65 or older for accidental falls per 100,000	1,270.8	1,496.0
Dental Health			

Indicators	Description	Yolo	California
ED Visits For Dental Diagnosis Child	ED visits for persons under age 18 with dental problems as primary diagnosis per 100,000	219.9	441.0
ED Visits for Dental Diagnosis Adult	ED visits for persons aged 18 and older with dental problems as the primary diagnosis per 100,000	321.2	441.0
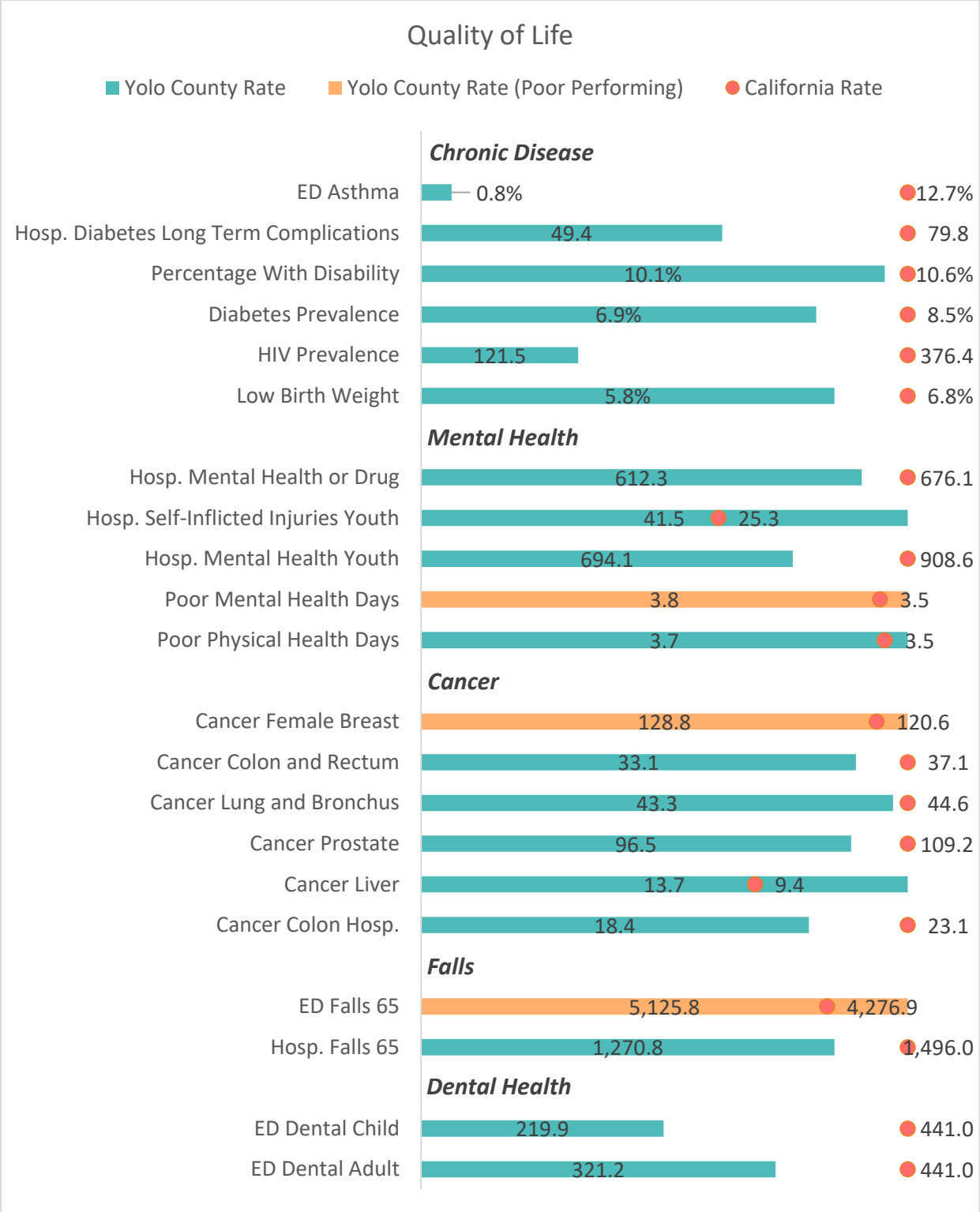
Figure 7: Quality of life indicators

Health Behaviors

Table 9: Health behaviors indicators compared to state benchmarks

Indicators	Description	Yolo	California
Excessive Drinking	Percentage of adults reporting binge or heavy drinking	19.5%	17.8%
Drug Overdose Deaths	Age-adjusted deaths per 100,000	15.1	12.2
Adult Obesity	Percentage of adults reporting BMI of 30 or more	22.9%	22.7%
Breastfeeding Rate	Percentage of infants exclusively breast fed in hospital	84.2%	69.6%
Physical Inactivity	Percentage age 20 and older with no reported leisure-time physical activity	15.9%	17.9%
Limited Access to Healthy Food	Percentage of population that is low-income and does not live close to a grocery store	1.9%	3.3%
mRFEI	Percentage of food outlets that are classified as 'healthy'	0.2%	0.1%
Access to Exercise	Percentage of population with adequate access to locations for physical activity	90.0%	89.6%
STI Chlamydia Rate	Number of newly diagnosed chlamydia cases per 100,000	393.6	487.5
Teen Birth Rate	Number of births per 1,000 females aged 15-19	12.5	24.1
Adult Smokers	Percentage of adults who are current smokers	11.7%	11.0%
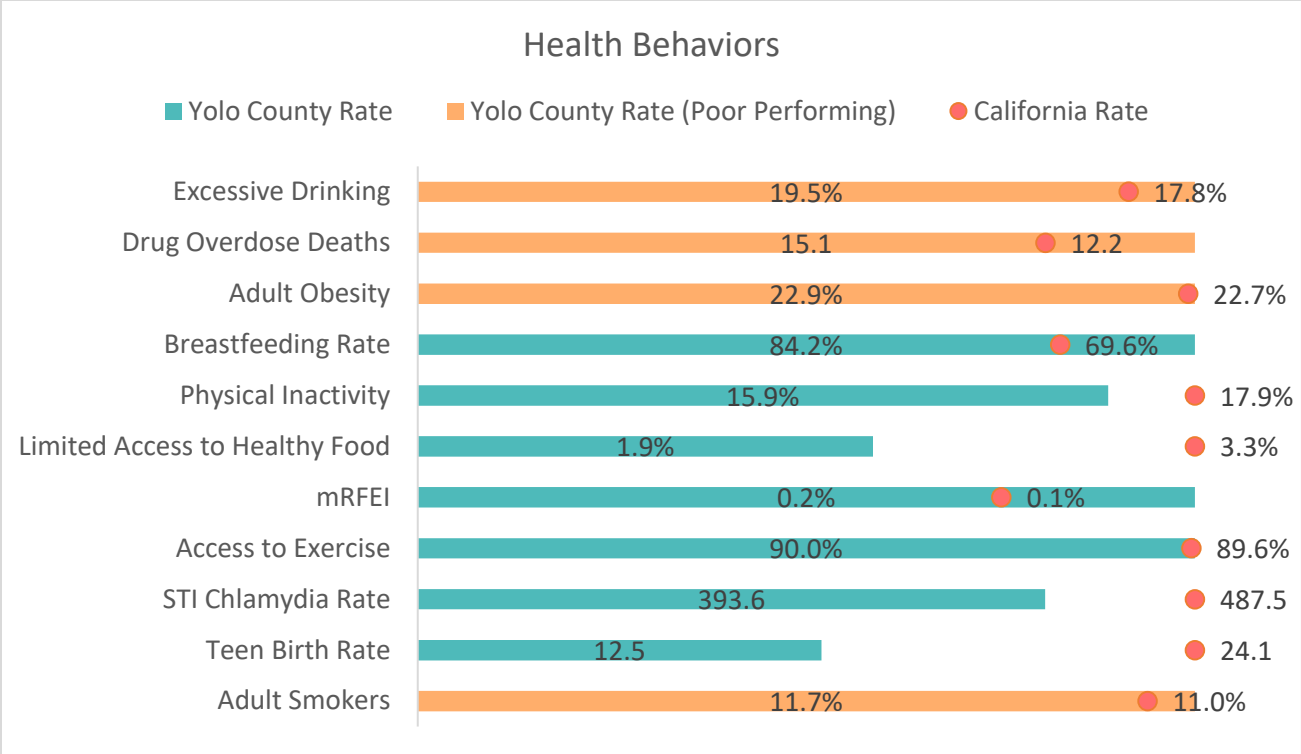
Figure 8: Health behavior indicators

Clinical Care

Table 10: Clinical care indicators compared to state benchmarks

Indicators	Description	Yolo	California
Health Care Costs	Amount of price-adjusted Medicare reimbursements per enrollee	$7,100	$9,100
HPSA Dental Health	Reports if a portion of the county falls within a Health Professional Shortage Area	No	
HPSA Mental Health	Reports if a portion of the county falls within a Health Professional Shortage Area	Yes	
HPSA Primary Care	Reports if a portion of the county falls within a Health Professional Shortage Area	No	
HPSA Medically Underserved Area	Reports if a portion of the county falls within a Medically Underserved Area	Yes	
Mammography Screening	Percentage of female Medicare enrollees aged 67-69 that receive mammography screening	63.2%	59.7%
Dentists	Number per 100,000 residents	57.5	82.3
Prenatal Care	Percentage of live births receiving prenatal care in the first trimester	82.8%	83.3%
Mental Health Providers	Number per 100,000 residents	334.6	308.2
Psychiatry Providers	Number per 100,000 residents	15.0	13.4
Specialty Care Providers	Number per 100,000 residents	207.4	183.2

Primary Care Physicians	Number per 100,000 residents	120.2	78.0
Preventable Hospital Stays	Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	24.9	36.2
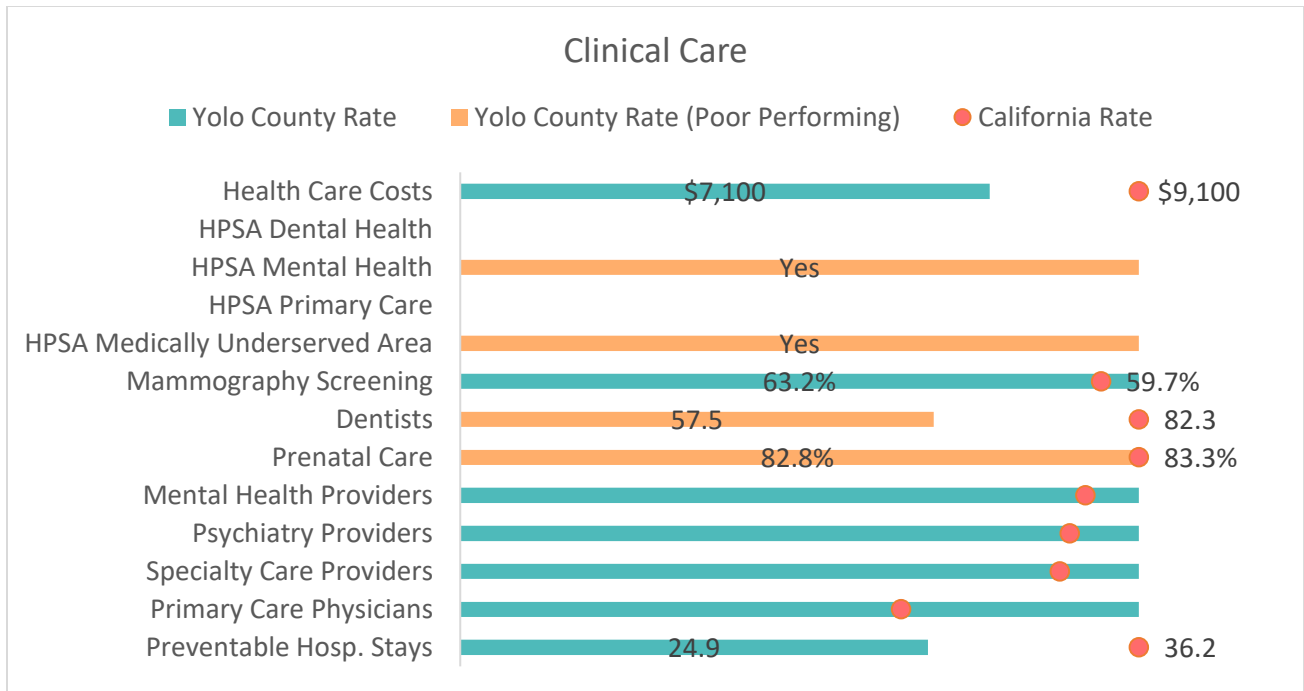
Figure 9: Clinical care indicators

Social and Economic or Demographic Factors

Table 11: Social and economic or demographic factor indicator compared to state benchmarks

Indicators	Description	Yolo	California
Homicides	Deaths per 100,000 residents	1.8	5.0
Violent Crimes	Reported violent crime offenses per 100,000	317.4	407.0
Motor Vehicle Crash Deaths	Deaths per 100,000 residents	10.0	8.5
Third Grade Reading	Percentage of students who are English language learners	40.3%	43.9%
English Language Learners	Percentage of third-grade students who met or exceeded language arts standards in the California assessment of student performance & progress	20.2%	20.4%
Some College	Percentage aged 25-44 with some post-secondary education	69.4%	63.5%
High School Graduation	Percentage of ninth-grade cohort graduating high school in 4 years	88.8%	82.3%

Unemployment Rate	Percentage of population 16 and older unemployed but seeking work	5.8%	5.4%
Children with Single Parents	Percentage of children living in a household headed by a single parent	28.0%	31.8%
Social Associations	Membership associations per 100,000 residents	6.5	5.8
Free Reduced Lunch	Percentage of children in public schools eligible for free or reduced price lunch	52.3%	58.9%
Children in Poverty	Percentage of children under age 18 in poverty	15.2%	19.9%
Median Household Income	Median household income	$63,645	$67,715
Uninsured	Percentage of population under age 65 without health insurance	7.5%	9.7%
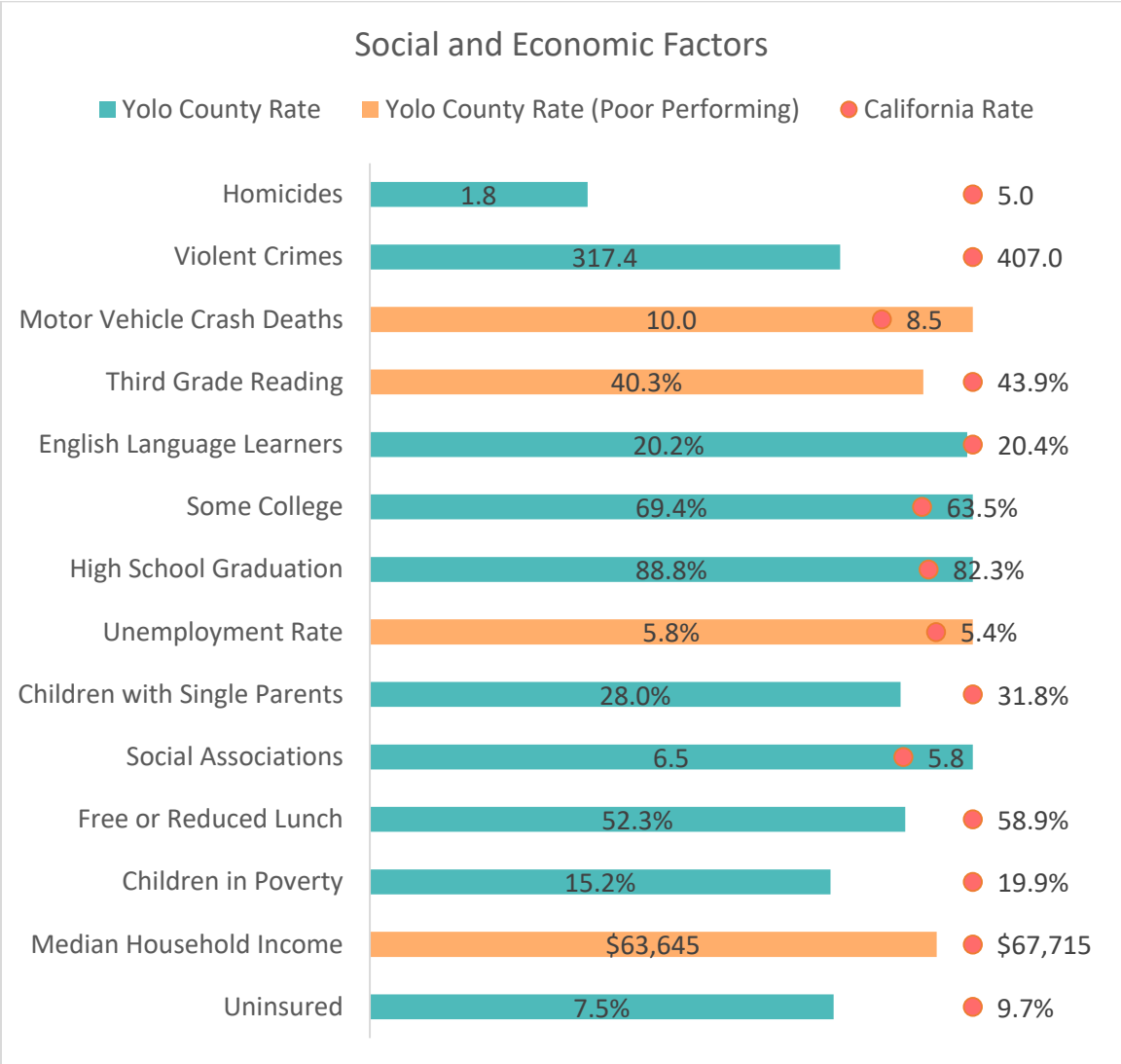
Figure 10: Social and economic factors

Physical Environment

Table 12: Physical environment indicators compared to state benchmarks

Indicators	Description	Yolo	California
Severe Housing Problems	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities	25.0%	27.9%
Housing Units No Vehicle	Percentage of households with no vehicle available	7.9%	7.6%
Public Transit Proximity	Percentage of population living in a Census block within a quarter of a mile to a fixed transit stop	88.3%	
Pollution Burden	Percentage of population living in a Census tract with a CalEnviroscreen Pollution Burden score greater than the 50th percentile for the state	44.4%	50.4%
Air Particulate Matter	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	8.7	8.0
Drinking Water Violations	Reports whether or not there was a health-related drinking water violation in a community within the county	Yes	
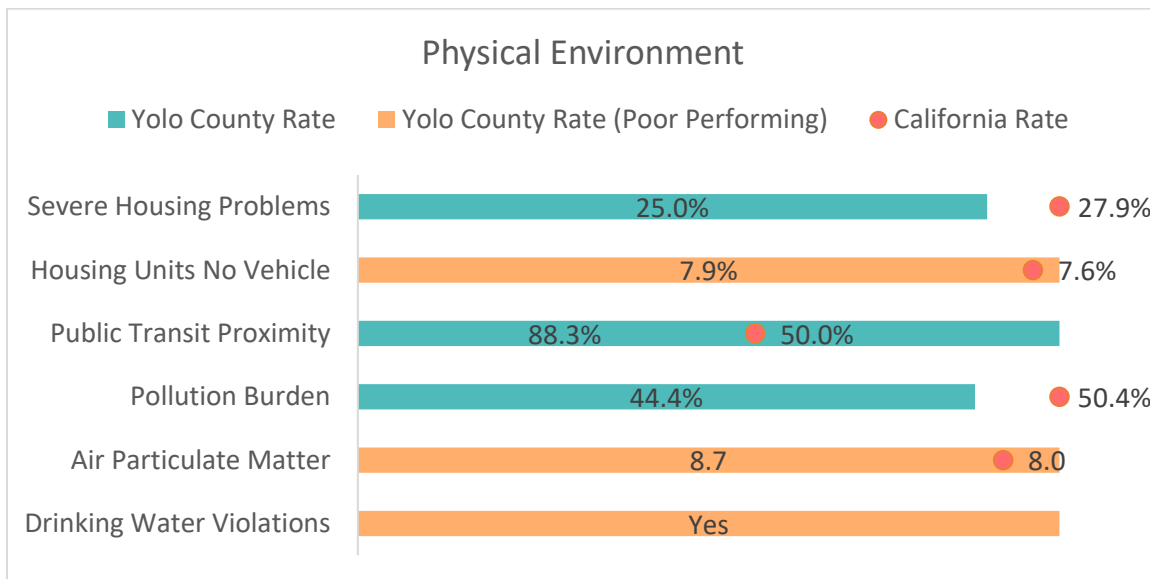
Figure 11: Physical environment

Survey Questions

Table 13. Survey questions compared to relevant benchmarks indicating the percentage of respondents

Question	Yolo	Benchmark
Do you have a condition that limits one or more physical activities?	29.0%	29.7%
Have you ever been told you have asthma/lung disease/COPD/emphysema?	17.5%	14.8%
Have you ever been told you have an autoimmune disease (Lupus, Type 1 diabetes)?	5.2%	2.2%
Have you ever been told you have cancer?	5.8%	4.1%
Have you ever been told you have diabetes?	12.6%	9.1%
Have you ever been told you have heart disease	4.7%	6.2%
Have you ever been told you have hypertension?	16.9%	28.4%
Have you ever been told you have mental illness?	11.8%	8.0%
Have you ever been told you have a drug or alcohol problem?	2.8%	2.2%
Have you ever been told you have a physical disability?	8.5%	8.1%
Have you ever been told that you have obesity or overweight?	21.6%	27.9%
Needed behavioral health care in the past 12 months	26.5%	16.4%
Needed behavioral health care but didn't get it because of cost	27.7%	46.8%
Needed behavioral health care but didn't get it because of lack of comfort talking about it	15.2%	17.0%
Needed behavioral health care but didn't get it because of stigma	6.5%	21.3%
Needed behavioral health care but didn't get it because of lack of insurance coverage	8.2%	17.0%
Needed behavioral health care but didn't get it because of appointment availability	10.3%	14.9%
Needed behavioral health care but didn't get it because didn't know where to go	20.7%	38.3%
Do you have health insurance? (Response: No)	8.2%	7.3%
Takes more than 30 minutes to get to doctor	14.5%	19.3%
Unsatisfied or very unsatisfied with getting an appointment quickly	15.3%	21.6%
Didn't receive medical screenings because it took too long	11.3%	20.6%
Didn't receive medical screenings because of language issues	3.3%	7.5%
Didn't receive medical screenings because of transportation	3.5%	7.5%
Didn't receive medical screenings because of clinic hours	4.4%	13.1%
Didn't receive medical screenings because of doctor availability	3.3%	8.4%
Didn't receive medical screenings because of lack of health insurance	11.7%	26.2%
Didn't receive medical screenings because of inadequate insurance	7.7%	18.7%
Didn't receive medical screenings because of lack of trust with providers	2.4%	4.7%
Went to Emergency Room (ER) because couldn't get urgent care appointment	14.9%	20.0%
Went to ER for prescription refill	4.9%	5.5%

Went to ER because more convenient	10.6%	9.7%
Went to ER because lack usual source of care	5.1%	6.9%
Do you have dental insurance? (Response: Yes)	67.2%	61.3%
Been to dentist in last 12 months (Response: Yes)	63.3%	70.3%

Survey Questions

Legend: ■ Yolo County Rate ■ Yolo County Rate (Poor Performing) ● Benchmark

Survey Question	Yolo County Rate	Benchmark
Have a condition that limits physical activities?	29.0%	29.7%
Ever told you have asthma/lung…	17.5%	14.8%
Ever told you have autoimmune disease?	5.2%	2.2%
Ever told you have cancer?	5.8%	4.1%
Ever told you have diabetes?	12.6%	9.1%
Ever told you have heart disease	4.7%	6.2%
Ever been you have hypertension?	16.9%	28.4%
Ever told you have mental illness?	11.8%	8.0%
Ever told you have a drug or alcohol problem?	2.8%	2.2%
Ever been you have a physical disability?	8.5%	8.1%
Ever been that you have obesity/overweight?	21.6%	27.9%
Needed behavioral healthcare in past 12 months	26.5%	16.4%
No needed behavioral health care, cost	27.7%	46.8%
No needed behavioral health care,…	15.2%	17.0%
No needed behavioral healthcare, stigma	6.5%	21.3%
No needed behavioral healthcare, lack of…	8.2%	17.0%
No needed behavioral healthcare, appt…	10.3%	14.9%
No needed behavioral healthcare, didn't know…	20.7%	38.3%
Do you have health insurance? (Response: No)	8.2%	7.3%
Takes more than 30 minutes to get to doctor	14.5%	19.3%
Unsatisfied/very unsatisfied w/ getting…	15.3%	21.6%
No medical screenings, took to long	11.3%	20.6%
No medical screenings, language issues	3.3%	7.5%
No medical screenings, transportation	3.5%	7.5%
No medical screenings, clinic hours	4.4%	13.1%
No medical screenings, doctor availability	3.3%	8.4%
No medical screenings, lack of health insurance	11.7%	26.2%
No medical screenings, inadequate insurance	7.7%	18.7%
No medical screenings, lack of trust with…	2.4%	4.7%
Went to ER because I couldn't get urgent care…	14.9%	20.0%
Went to ER for prescription refill	4.9%	5.5%
Went to ER because more convenient	10.6%	9.7%
Went to ER because lack usual source of care	5.1%	6.9%
Do you have dental insurance? (Response: Yes)	67.2%	61.3%
Been to dentist in last 12 months (Response:…	63.3%	70.3%

Figure 12: Countywide survey responses compared to relevant benchmarks

CHNA/CHA Methods and Processes

Two related models were foundational in this CHNA/CHA. The first is a conceptual model that expresses the theoretical understanding of community health used in the analysis. This understanding is important because it provides the framework underpinning the collection of primary and secondary data. It is the tool used to ensure that the results are based on a rigorous understanding of those factors that influence the health of a community. The second model is a process model that describes the various stages of the analysis. It is the tool that ensures that the resulting analysis is based on a tight integration of community voice and secondary data and that the analysis meets both federal regulations for conducting hospital CHNAs and the requirement for conducting CHAs under PHAB.

Conceptual Model

The conceptual model used in this needs assessment is shown in Figure 13. This model organizes populations' individual health-related characteristics in terms of how they relate to up- or downstream health and health-disparities factors. In this model, health outcomes (quality and length of life) are understood to result from the influence of health factors describing interrelated individual, environmental, and community characteristics, which in turn are influenced by underlying policies and programs.

This model was used to guide the selection of secondary indicators in this analysis as well as to express in general how these upstream health factors lead to the downstream health outcomes. It also suggests that poor health outcomes within Yolo County can be improved through policies and programs that address the health factors contributing to them. This conceptual model is a slightly modified version of the County Health Rankings Model used by the Robert Wood Johnson Foundation. It was altered by adding a "Demographics" category to the "Social and Economic Factors" in recognition of the influence of demographic characteristics on health outcomes.

To generate the list of secondary indicators used in the assessment, all partners reviewed each conceptual model category and discussed potential indicators that could be used or that were important to each partner in order to fully represent the category. The results of this discussion were then used to guide secondary data collection.
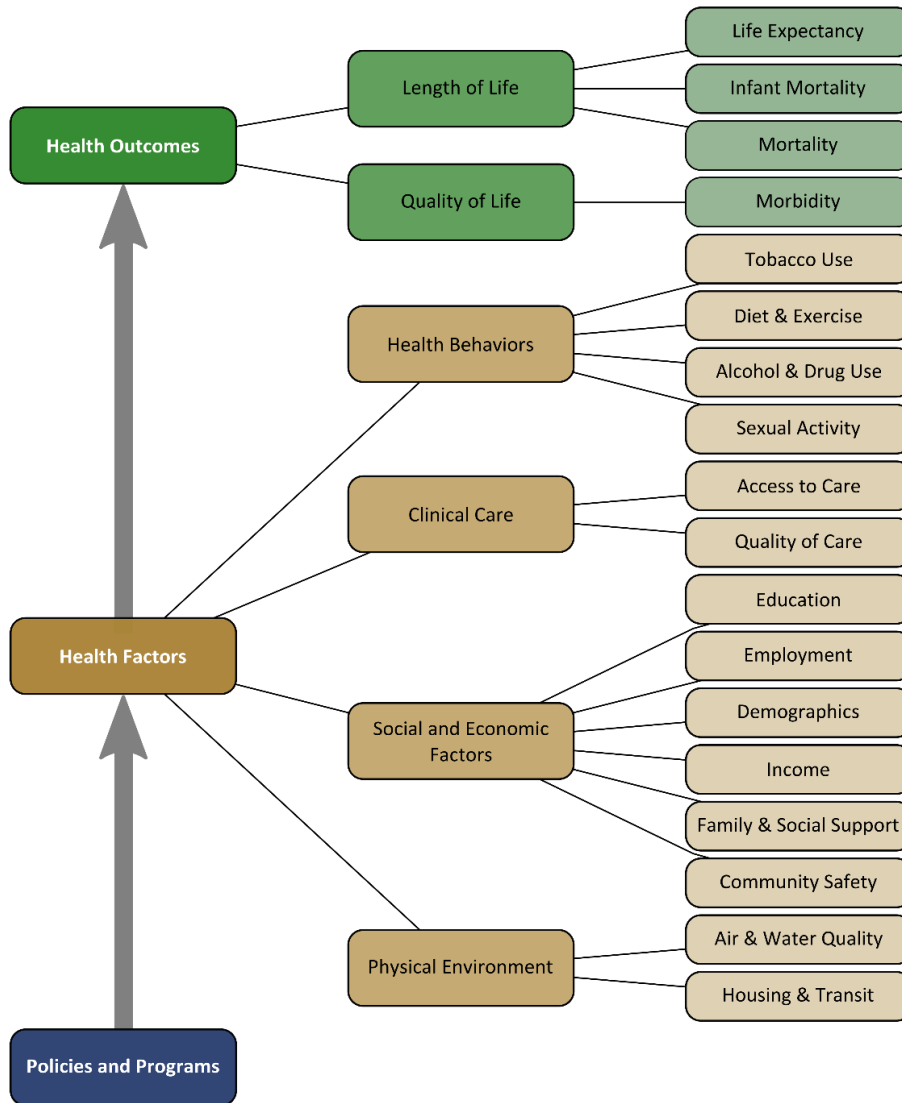
Figure 13: Community Health Assessment Conceptual Model as modified from the County Health Rankings Model, Robert Wood Johnson Foundation, and University of Wisconsin, 2015

Process Model

Figure 14 outlines the data collection and stages of this analysis. The project began by confirming the geographic area agreed to by the partners (Sutter Davis Hospital, Woodland Memorial Hospital, and Yolo County Health and Human Service Community Health Branch) for conducting the CHNA/CHA. All partners agreed that Yolo County would serve as the area over which the joint CHNA/CHA would occur.

Primary data collection included both key informant and focus group interviews with community health experts and residents, as well as a community survey spanning the county area. Secondary data, including the health-factor and health-outcome indicators identified using the conceptual model and the Community Health Vulnerability Index (CHVI) values for

each census tract within the county, were used to identify areas or population subgroups within the county experiencing health disparities.
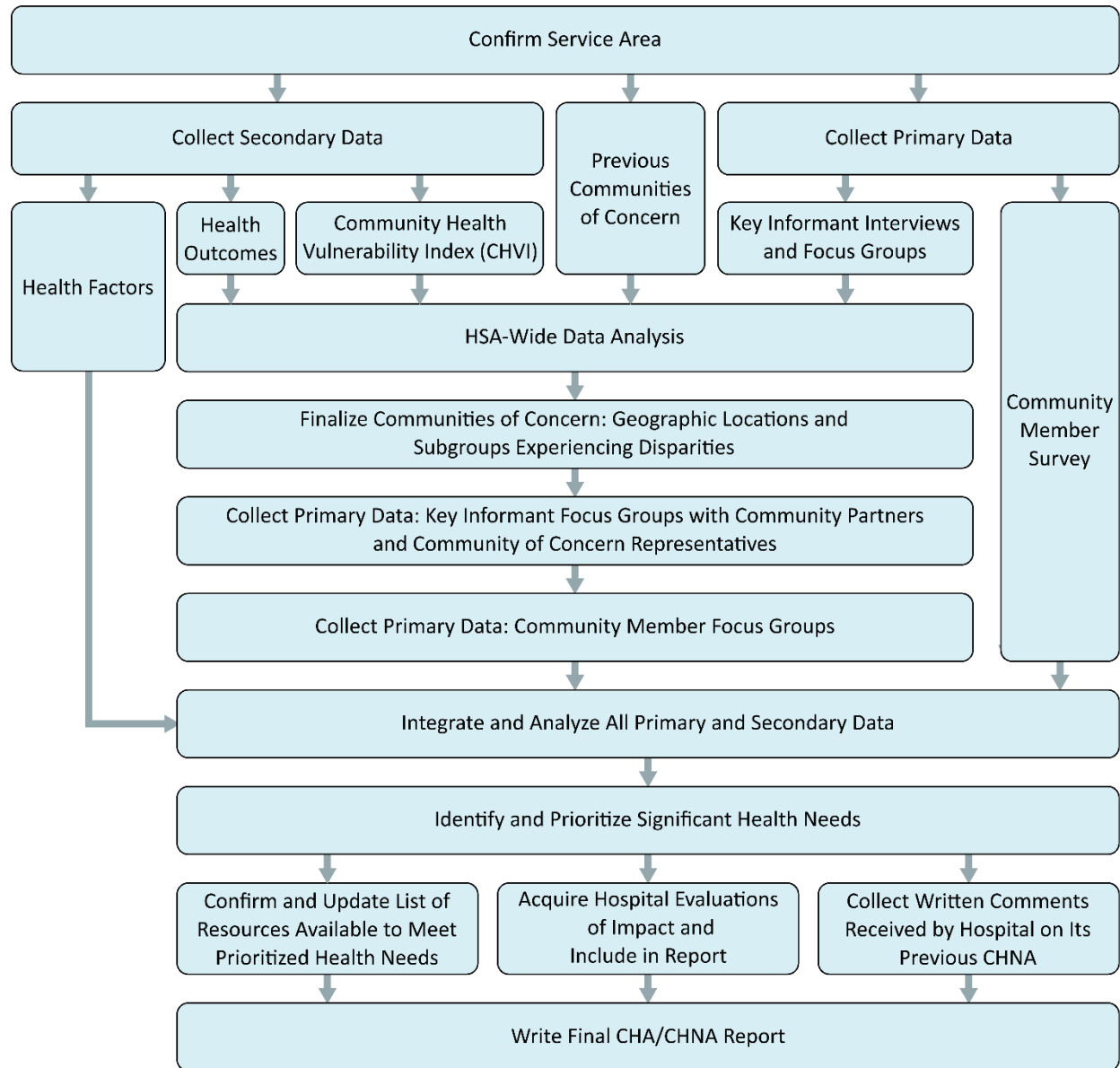
Figure 14: CHNA/CHA process model

Overall primary and secondary data were integrated to identify significant health needs for Yolo County. Significant health needs were then prioritized based on analysis of the primary data. Finally, information was collected regarding the resources available within the community to meet the identified health needs. For the hospital partners, an evaluation of the impact of the hospital's prior efforts was obtained from hospital representatives and written comments on the previous CHNA were gathered and included in the report.

Greater detail on the collection and processing of the secondary and primary data is given in the next two sections. This is followed by a more detailed description of the methodology utilized during the main analytical stages of the process.

Primary Data Collection and Processing

Primary Data Collection

Input from the community in Yolo County was collected through three main mechanisms. First, key Informant interviews were conducted with community health experts and area service providers (i.e., members of social-service nonprofit organizations and related healthcare organizations). These interviews occurred in both one-on-one and in group interview settings. Second, focus groups were conducted with community residents living in identified Communities of Concern or representing communities experiencing health disparities. Third, a countywide survey was administered to community residents.

For key informant interviews and focus groups, all participants were given an informed consent form prior to their participation, which provided information about the project, asked for permission to record the interview, and listed the potential benefits and risks of involvement in the interview. All interview data were collected through note-taking and, in some instances, recording.

Key Informant Results

Primary data collection with key informants included two phases. Phase one began by interviewing area-wide service providers with knowledge of the Yolo County region, including input from the designated public health department. Data from these area-wide informants, coupled with sociodemographic data, were used to identify additional key informants for the assessment that were included in phase two.

As a part of the interview process, all key informants were asked to identify vulnerable populations. The interviewer asked each participant to verbally explain what vulnerable populations existed in the county. As needed, for a visual aid, key informants were provided a map of the county to directly point to the geographically locations of these vulnerable communities. Results of this are presented in Figure 2 and Table 2. Additional key informant interviews were focused on the geographic locations and subgroups identified.

Table 14 contains a listing of community health experts, or key informants, that contributed input to the CHNA/CHA. The table describes the name of the represented organization, the number of participants, area of expertise and organization, populations served by the organization, and the date of the interview. The instrument used, Key Informant Interview Guide, is contained in Appendix A.

Table 14: Key informant sample for Yolo County

Organization	# of participants	Area of Expertise/Names of Organization(s)	Population(s) Served	Date
Yolo County Public Health	8	Public Health: Countywide Public Health Officer, Children's Services, Countywide Health Promotion, Yolo County Emergency Response, Public Health Nursing	All Yolo County residents; youth of Yolo County, low-income residents of Yolo County	6.18.18
Woodland Memorial Hospital	8	Clinical Hospital Staff: Clinical Case Work, Emergency Room Staff, Hospital-Based Clinical Social Workers	Residents of Yolo County; Central Woodland community members, low-income, uninsured and underinsured community members	6.26.18
CommuniCare Health Centers Salud Clinic - West Sacramento	6	Federally Qualified Health Center (FQHC) Clinical Service Providers: Clinical Case Workers, Mental Health Coordinators, Medi-Cal Eligibility Case Workers, Behavioral Specialist	Low-income residents of Yolo County with a specific focus on community members from West Sacramento; uninsured and underinsured; community members suffering with mental illness; homeless community members	6.27.18
CommuniCare Health Centers Hansen Family Health Center	4	FQHC Community Clinic Service Providers: Preventive Healthcare Coordinator for Woodland Area; Sexual Health Educator, Behavioral Specialist	Low-income residents of Yolo County with a specific focus on Woodland; young adults and teens; homeless community members; community members engaging in substance abuse	6.28.18
Sutter Davis Hospital	1	Clinical Case Manager: Case Management Manager of Sutter Central Valley Area	Low-income residents of Yolo County and greater Central Valley	6.29.18

Organization	# of participants	Area of Expertise/Names of Organization(s)	Population(s) Served	Date
			Area; uninsured and underinsured	
Sutter Davis Hospital	2	Clinical Case Management and ED Staff: Clinical Case Management for Davis Area	All residents of the Yolo County area with a specific focus on Davis. Low-income residents seeking health care access	7.10.18
Countywide Area Service Providers	26	Providers representing 25 separate community groups and topics: Stanford Youth Solutions, Yolo Community Care Continuum, Suicide Prevention and Crisis Service, Cache Creek Conservancy; Woodland United Way, Davis East Consulting, Fourth and Hope (homeless shelter), Yolo Healthy Aging Alliance, St. Johns Retirement, Citizens Who Care, Yolo County Children's Alliance, Tuleyone, Apex Care, Woodland's Dinner on Main, PRIDE Industry, Meals on Wheels, Yolo Employment Services, American Cancer Society, Soroptimist of Greater CA, Yolo Food Bank - Davis, CommuniCare Health Centers, First in Relief, Yolo Crisis Nursery	All Yolo County residents; youth and young adults struggling with substance abuse; community members needing mental health treatment; aging population; tribal county residents; low-income; community members struggling with food insecurity; LGBTQ+ community members; unemployed; homeless; uninsured and underinsured	06.01.18

Organization	# of participants	Area of Expertise/Names of Organization(s)	Population(s) Served	Date
Yolo Public Health Mental Health Partners	6	Mental Health Community Service Providers: Yolo Healthy Aging Alliance, Yolo County Mental Health Workgroup, Mental Health Services Act Yolo County Staff, NAMI YOLO Representative, Public Health Nurse – In-Home Support Services	Aging population of Yolo County; low-income older community members; residents struggling with mental health and substance abuse; home bound community members	08.09.18

Focus Group Results

Focus group interviews were conducted with community members living in geographic areas of the service area identified as locations or populations experiencing a disparate amount of poor socioeconomic conditions and poor health outcomes, or Communities of Concern. Recruitment consisted of referrals from designated service providers representing vulnerable populations, as well as direct outreach to special population groups. The instrument used, Focus Group Interview Guide, is contained in Appendix A.

Table 15 contains a listing of community resident groups that contributed input to the CHNA/CHA. The table describes the location of the focus group, the date it occurred, the total number of participants, and demographic information for focus group members.

Table 15: Focus group list for Yolo County

Location	Date	# of participants	Demographic Information
Rural Innovations in Social Economics (RISE) in Esparto CA	08.10.18	11	Spanish-Speaking community members (including Migrant Farm Community members) from Woodland, Esparto, Capay, Madison and Winters
West Sacramento Capitol Courtyard in West Sacramento	8.21.18	10	Low-income, formally homeless, low access to stable housing, African American/Caucasian/Hispanic

| Woodland - Yolo Hospice | 09.07.18 | 11 | Seniors living in the Woodland/Davis areas |

Countywide Survey Results

A countywide survey was distributed from May 15, 2018, through July 31, 2018. The survey included questions from the Community Themes and Strengths Assessment conducted by Yolo County partners in 2014 as a part of the MAPP process and questions from a healthcare access survey from 2015. The partners combined both surveys, removed duplicative questions, and included other critical questions that were important to the partnership. The target sample was 1,200 participants. The total sample for the 2019 CHNA/CHA Countywide Survey was 2,291.

The survey was administered and analyzed by the Yolo County Health and Human Services Community Health Branch. Partners working on the CHNA/CHA helped with dissemination by both direct survey distribution and collection as well as by connecting with other area partners. The survey was available in hard copy and via an electronic submission link. Survey distribution included health providers (CommuniCare federally qualified health centers, Dignity Health, and Sutter Health), a summer camp program, food banks, multiple county steering committee members, senior centers, county libraries, city hall, CalFresh, WIC, Yolo County Service Centers, farmer's markets, and Meals on Wheels. Gift cards were provided as an incentive. For every 200 participants, a gift card drawing of $30 was given to 1 participant (11 gift cards in total). Data entry of the community surveys occurred from June to August 2018. The survey instrument is contained in Appendix A of this report. Figure 15 displays the racial/ethnic profile of the survey respondents in comparison to census counts for the county.
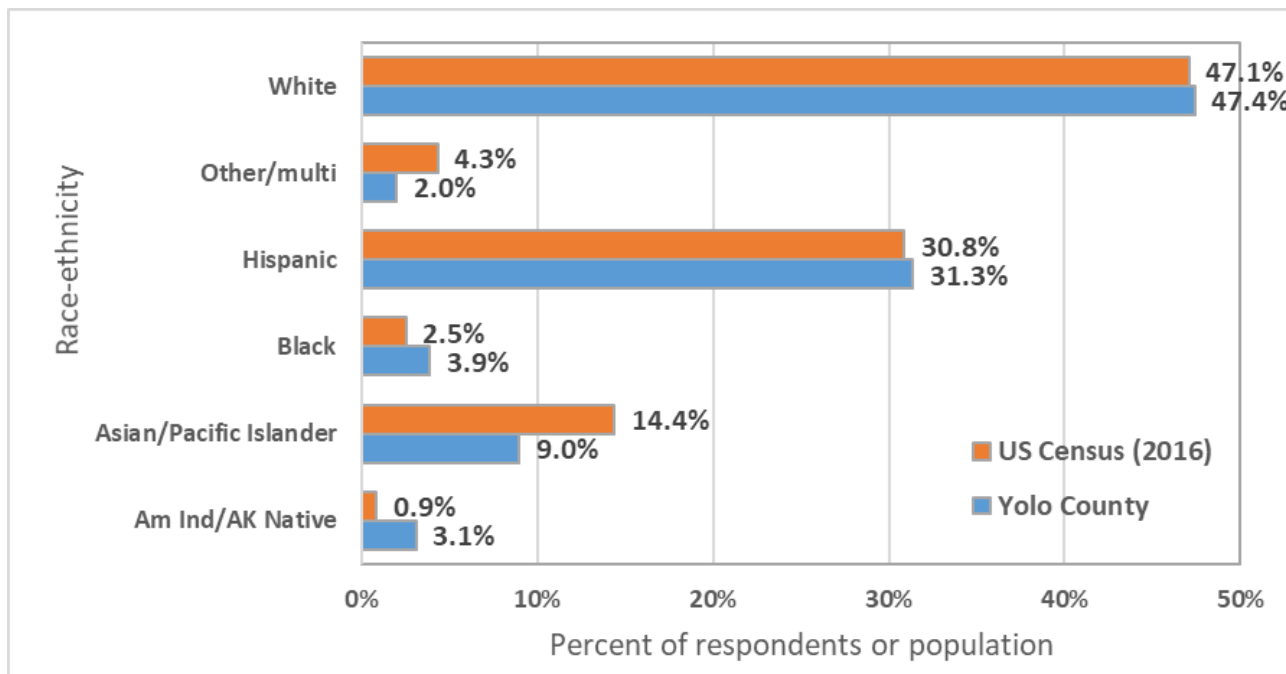
Figure 15: Survey of race/ethnicity profile for Yolo County (Yolo County) vs. 2016 U.S. Census profile for Yolo County (U.S. Census Bureau)

Primary Data Processing

Data were analyzed using NVivo 11 qualitative software. Key informants were also asked to write data directly onto a map of Yolo County for identification of vulnerable populations in the county. Content analysis included thematic coding to potential health need categories, the identification of special populations experiencing health issues, and the identification of resources. In some instances, data were coded in accordance with the interview question guide. Results were aggregated to inform the determination of prioritized significant health needs. Survey responses were organized by question, and frequency/distribution counts were compared to standard benchmarks, which included state and national benchmarks as well as comparison to survey results collected by Yolo County in 2014.

Secondary Data Collection and Processing

The secondary data used in the analysis can be thought of as falling into four categories. The first three are associated with the various stages outlined in the process model. These include 1) health-outcome indicators, 2) Community Health Vulnerability Index (CHVI) data used to identify areas and population subgroups experiencing disparities, and 3) health-factor and health-outcome indicators used to identify significant health needs. The fourth category of indicators is used to help describe the socioeconomic and demographic characteristics of Yolo County.

Mortality data at the ZIP Code level from the California Department of Public Health (CDPH) was used to represent health outcomes. U.S. Census Bureau data collected at the tract level was used to create the CHVI. Countywide indicators representing the concepts identified in the

conceptual model and collected from multiple data sources were used in the identification of significant health needs. In the fourth category, U.S. Census Bureau data were collected at the state, county, and ZIP Code Tabulation Areas (ZCTA) levels and used to describe general socioeconomic and demographic characteristics in the county. This section details the sources and processing steps applied to the CDPH health-outcome data; the U.S. Census Bureau data used to create the CHVI; the countywide indicators used to identify significant health needs; and the sources for the socioeconomic and demographic variables obtained from the U.S. Census Bureau.

California Department of Public Health (CDPH) Health-Outcome Data

Mortality and birth-related data for each ZIP Code within the county were collected from the California Department of Public Health (CDPH). The specific indicators used are listed in Table 16. To increase the stability of calculated rates, each of these indicators were collected for the years from 2012 to 2016. The specific processing steps used to derive these rates are described below.

Table 16: Mortality and birth-related indicators used in the CHNA/CHA

Indicator	ICD10 Codes
Heart Disease Mortality	I00-I09, I11, I13, I20-I51
Malignant Neoplasms (Cancer) Mortality	C00-C97
Cerebrovascular Disease (Stroke) Mortality	I60-I69
Chronic Lower Respiratory Disease (CLD) Mortality	J40-J47
Alzheimer's Disease Mortality	G30
Unintentional Injury (Accident) Mortality	V01-X59, Y85-Y86
Diabetes Mellitus Mortality	E10-E14
Influenza and Pneumonia Mortality	J09-J18
Chronic Liver Disease and Cirrhosis Mortality	K70, K73, K74
Essential Hypertension and Hypertensive Renal Disease Mortality	I10, I13, I15
Intentional Self-Harm (Suicide) Mortality	Y03, X60-X84, Y87.0
Nephritis, Nephrotic Syndrome, and Nephrosis (Kidney disease) Mortality	N00-N07, N17-N19, N25-N27
Total Births	
Deaths of Those Under 1 Year	

ZIP Code Definitions

All CDPH indicators used at this stage of the analysis are reported by patient mailing ZIP Codes. ZIP Codes are defined by the U.S. Postal Service as a single location (such as a PO Box), or a set of roads along which addresses are located. The roads that comprise such a ZIP Code may not form contiguous areas and do not match the areas used by the U.S. Census Bureau, which is the main source of population and demographic information in the United States. Instead of

measuring the population along a collection of roads, the census reports population figures for distinct, largely contiguous areas. To support the analysis of ZIP Code data, the U.S. Census Bureau created ZCTAs. ZCTAs are created by identifying the dominant ZIP Code for addresses in a given census block (the smallest unit of census data available), and then grouping blocks with the same dominant ZIP Code into a corresponding ZCTA. The creation of ZCTAs allows us to identify population figures that, in combination with the health-outcome data reported at the ZIP Code level, make it possible to calculate rates for each ZCTA. However, the difference in the definition between mailing ZIP Codes and ZCTAs has two important implications for analyses of ZIP Code level data.

First, ZCTAs are approximate representations of ZIP Codes rather than exact matches. While this is not ideal, it is nevertheless the nature of the data being analyzed. Second, not all ZIP Codes have corresponding ZCTAs. Some PO Box ZIP Codes or other unique ZIP Codes (such as a ZIP Code assigned to a single facility) may not have enough addressees residing in a given census block to ever result in the creation of a ZCTA. But residents whose mailing addresses correspond to these ZIP Codes will still show up in reported health-outcome data. This means that rates cannot be calculated for these ZIP Codes individually because there are no matching ZCTA population figures.

To incorporate these patients into the analysis, the point location (latitude and longitude) of all ZIP Codes in California[11] were compared to ZCTA boundaries.[12] These unique ZIP Codes were then assigned to either the ZCTA in which they fell or, in the case of rural areas that are not completely covered by ZCTAs, the ZCTA closest to them. The CDPH information associated with these PO Boxes or unique ZIP Codes were then added to the ZCTAs to which they were assigned.

For example, 95617 is a PO Box located in Davis, California. ZIP Code 95617 is not represented by a ZCTA, but it could have reported patient data. Through the process identified above, it was found that 95617 is located within the 95616 ZCTA. Data for both ZIP Codes 95617 and 95616 were therefore assigned to ZCTA 95616 and used to calculate rates. All ZIP Code level health-outcome variables given in this report are therefore reporting approximate rates for ZCTAs, but for the sake of familiarity of terms they are elsewhere presented as ZIP Code rates.

Rate Smoothing

All CDPH indicators were collected for all ZIP Codes in California. To protect privacy, CDPH masked the data for a given indicator if there were 10 or fewer cases reported in the ZIP Code. ZIP Codes with masked values were treated as having NA values reported, while ZIP Codes not included in a given year were assumed to have 0 cases for the associated indicator. As

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[11] Datasheer, L.L.C. (2018, July 16). *ZIP Code Database Free.* Retrieved from Zip-Codes.com: http://www.Zip-Codes.com

[12] U.S. Census Bureau. (2017). *TIGER/Line Shapefile, 2017, 2010 nation, U.S., 2010 Census 5-Digit ZIP Code Tabulation Area (ZCTA5) National.* Retrieved July 16, 2018, from http://www.census.gov/geo/maps-data/data/tiger-line.html

described above, patient records in ZIP Codes not represented by ZCTAs were added to those ZCTAs that they fell inside or were closest to.

When consolidating ZIP Codes into ZCTAs, if a PO Box ZIP Code with an NA value was combined with a non–PO Box ZIP Code with a reported value, then the NA value for the PO Box ZIP Code was converted to a 0. Thus, ZCTA values were recorded as NA only if all ZIP Codes contributing values to them had their values masked.

The next step in the analysis process was to calculate rates for each of these indicators. However, rather than calculating raw rates, Empirical Bayes smoothed rates (EBRs) were created for all indicators possible.[13] Smoothed rates are considered preferable to raw rates for two main reasons. First, the small population of many ZCTAs, particularly those in rural areas, meant that the rates calculated for these areas would be unstable. This problem is sometimes referred to as the small-number problem. Empirical Bayes smoothing seeks to address this issue by adjusting the calculated rate for areas with small populations so that they more closely resemble the mean rate for the entire study area. The amount of this adjustment is greater in areas with smaller populations, and less in areas with larger populations.

Because the EBR were created for all ZCTAs in the state, ZCTAs with small populations that may have unstable high rates had their rates "shrunk" to more closely match the overall indicator rate for ZCTAs in the entire state. This adjustment can be substantial for ZCTAs with very small populations. The difference between raw rates and EBRs in ZCTAs with very large populations, on the other hand, is negligible. In this way, the stable rates in large-population ZIP Codes are preserved, and the unstable rates in smaller-population ZIP Codes are shrunk to more closely match the state norm. While this may not entirely resolve the small-number problem in all cases, it does make the comparison of the resulting rates more appropriate. Because the rate for each ZCTA is adjusted to some degree by the EBR process, this also has a secondary benefit of better preserving the privacy of patients within the ZCTAs.

EBRs were calculated for each mortality indicator using the total population figure reported for ZCTAs in the 2014 American Community Survey 5-year Estimates table DP05. Data for 2014 were used because this represented the midpoint year of the 2012–2016 range of years for which CDPH data were collected. To calculate infant mortality rate, the total number of deaths for the population aged less than one year was divided by the total number of births.

ZCTAs with NA values recorded were treated as having a value of 0 when calculating the overall expected rates during the smoothing process but were kept as NA for the individual ZCTA. This meant that smoothed rates could be calculated for indicators, but if a given ZCTA had a value of NA for a given indicator, it retained that NA value after smoothing.

Empirical Bayes smoothing was attempted for every overall indicator but could not be calculated for some. In these cases, raw rates were used instead. These smoothed or raw

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[13] Anselin, L. (2003). *Rate Maps and Smoothing.* Retrieved February 16, 2013, from http://www.dpi.inpe.br/gi

mortality rates were then multiplied by 100,000 so that the final rates represented deaths per 100,000 people. In the case of infant mortality, the rates were multiplied by 1,000, so the final rate represents infant deaths per 1,000 live births.

Community Health Vulnerability Index (CHVI)

The CHVI is a health-care-disparity index largely based on the Community Need Index (CNI) developed by Barsi and Roth.[14] The CHVI uses the same basic set of demographic indicators to address healthcare disparities as outlined in the CNI, but these indicators are aggregated in a different manner to create the CHVI. For this report, the following nine indicators were obtained from the 2016 American Community Survey 5-year Estimate dataset at the census tract[15] level and are contained in Table 17.

Table 17: Indicators used to create the Community Health Vulnerability Index

Indicator	Description	Source Data Table	Variables Included
Minority	The percentage of the population that is Hispanic or reports at least one race that is not white	B0302	HD01_VD01, HD01_VD03
Limited English	The percentage of the population 5 years or older that speaks English less than "well"	B16004	HD01_DD01, HD01_VD07, HD01_VD08, HD01_VD12, HD01_VD13, HD01_VD17, HD01_VD18, HD01_VD22, HD01_VD23, HD01_VD29, HD01_VD30, HD01_VD34, HD01_VD35, HD01_VD39, HD01_VD40, HD01_VD44, HD01_VD45, HD01_VD51, HD01_VD52, HD01_VD56, HD01_VD57, HD01_VD61, HD01_VD62, HD01_VD66, HD01_VD67
Not a High School Graduate	Percentage of population over 25 that are not high school graduates	S1501	HC02_EST_VC17
Unemployed	Unemployment rate among the population 16 or older	S2301	HC04_EST_VC01
Families with	Percentage of families with children that are in poverty	S1702	HC02_EST_VC02

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[14] Barsi, E. L., & Roth, R. (2005). The Community Needs Index. *Health Progress, 86*(4), 32-38. Retrieved from https://www.chausa.org/docs/default-source/health-progress/the-community-need-index-pdf.pdf?sfvrsn=2

[15] Census tracts are data reporting regions created by the U.S. Census Bureau that roughly correspond to neighborhoods in urban areas but may be geographically much larger in rural locations.

Indicator	Description	Source Data Table	Variables Included
Children in Poverty			
Elderly Households in Poverty	Percentage of households with householders 65 years or older that are in poverty	B17017	HD01_VD01, HD01_VD08, HD01_VD14, HD01_VD19, HD01_VD25, HD01_VD30
Single-Female-Headed Households in Poverty	Percentage of single-female-headed households with children that are in poverty	S1702	HC02_EST_VC02
Renters	Percentage of the population in renter-occupied housing units	B25008	HD01_VD01, HD01_VD03
Uninsured	Percentage of population that is uninsured	S2701	HC05_EST_VC01

Each indicator was scaled using a min-max stretch so that the tract with the maximum value for a given indicator within the study area received a value of 1, the tract with the minimum value for that same indicator within the study area received a 0, and all other tracts received some value between 0 and 1 proportional to their reported values. All scaled indicators were then summed to form the final CHVI. Areas with higher CHVI values therefore represent locations with relatively higher concentrations of the target index populations and are likely experiencing greater healthcare disparities.

Significant Health Need Identification Dataset

The third set of secondary data used in the analysis were the health-factor and health-outcome indicators used to identify the significant health needs. The selection of these indicators was guided by the previously identified conceptual model. Table 18 lists these indicators, their sources, the years they were measured, and the health-related characteristics from the conceptual model they are primarily used to represent.

Table 18: Health-factor and health-outcome data used in CHNA, including data source and time period in which the data were collected

Conceptual Model Alignment			Indicator	Data Source	Time Period
Health outcomes	Length of life	Infant mortality	Infant Mortality Rate	CHR*	2010–2016
		Life expectancy	Preterm Birth (<37 weeks)	VRBIS**	2016
			Life Expectancy at Birth	Institute for Health	2014

Conceptual Model Alignment			Indicator	Data Source	Time Period
				Metrics and Evaluation***	
		Mortality	Age-Adjusted Mortality	CDPH†	2014–2016
			Alzheimer's Disease Mortality	CDPH	2012–2016
			Child (under age 18) Mortality	CHR	2013–2016
			Premature Age-Adjusted Mortality	CHR	2014–2016
			Premature Death (Years of Potential Life Lost)	CHR	2014–2016
			Cerebrovascular Disease (Stroke)	CDPH	2012–2016
			Chronic Lower Respiratory Disease	CDPH	2012–2016
			Diabetes Mellitus	CDPH	2012–2016
			Diseases of the Heart	CDPH	2012–2016
			Essential Hypertension & Hypertensive Renal Disease	CDPH	2012–2016
			Influenza and Pneumonia	CDPH	2012–2016
			Intentional Self-Harm (Suicide)	CDPH	2012–2016
			Liver Disease	CDPH	2012–2016
			Malignant Neoplasms (Cancer)	CDPH	2012–2016
			Nephritis, Nephrotic Syndrome and Nephrosis (Kidney Disease)	CDPH	2012–2016
			Unintentional Injuries (Accidents)	CDPH	2012–2016
	Quality of life	Morbidity	ED Visits for Asthma	OSHPD‡	2015–2016
			Mental Health/Drug Related Hospitalizations	OSHPD	2016
			Hospitalizations for Self-Inflicted Injuries in Youth (<18)	OSHPD	2013–2016
			Mental Health Hospitalizations in Young Adults Aged 15-24	OSHPD	2016
			Preventable Hospital Stays for Diabetes	OSHPD	2005–2016
			Breast Cancer Incidence	California Cancer Registry	2010–2014
			Colorectal Cancer Incidence	California Cancer Registry	2010–2014
			Diabetes Prevalence	CHR	2014

Conceptual Model Alignment			Indicator	Data Source	Time Period
			Disability	Census	2016
			HIV Prevalence	CHR	2015
			Low Birth Weight	CHR	2010–2016
			Lung Cancer Incidence	California Cancer Registry	2010–2014
			Prostate Cancer Incidence	California Cancer Registry	2010–2014
			Liver Cancer Incidence	California Cancer Registry	2006–2015
			ED Visits Due to Falls Age 65+	OSHPD	2014
			Hospitalizations Due to Falls 65+	OSHPD	2014
			ED Visits by Children with Dental Diagnosis	OSHPD	2016
			ED Visits by Adults with Dental Diagnosis	OSHPD	2016
			Colon Cancer Hospitalization	OSHPD	2016
			Poor Mental Health Days	CHR	2016
			Poor Physical Health Days	CHR	2016
Health factors	Health Behavior	Alcohol and drug use	Excessive Drinking	CHR	2016
			Drug Overdose Deaths	CDPH	2014–2016
		Diet and exercise	Adult Obesity	CHR	2014
			Breastfeeding Rate (Exclusive In-Hospital)	CDPH	2016
			Physical Inactivity	CHR	2014
			Limited Access to Healthy Foods	CHR	2015
			Modified Retail Food Environment Index (mRFEI)	Census	2016
			Access to Exercise Opportunities	CHR	2010 population/ 2016 facilities
		Sexual activity	Sexually Transmitted Infections (Chlamydia Rate)	CHR	2015
			Teen Birth Rate	CHR	2010–2016
		Tobacco use	Adult Smoking	CHR	2016

Conceptual Model Alignment			Indicator	Data Source	Time Period
Clinical Care		Access to Care	Healthcare Costs	CHR	2015
			Health Professional Shortage Area - Dental	HRSA§	2018
			Health Professional Shortage Area - Mental Health	HRSA	2018
			Heath Professional Shortage Area - Primary Care	HRSA	2018
			Medically Underserved Areas	HRSA	2018
			Mammography screening	CHR	2014
			Dentists	CHR	2016
			Prenatal Care (1st Trimester)	VRBIS	2014–2016
			Mental Health Providers	CHR	2017
			Psychiatrists	HRSA	2015
			Specialty Care Providers	HRSA	2015
			Primary Care Physicians	CHR	2015
		Quality Care	Preventable Hospital Stays (Ambulatory Care Sensitive Conditions)	CHR	2015
	Social & Economic/Demographic Factors	Community safety	Homicide Rate	CHR	2010–2016
			Violent Crime Rate	CHR	2012–2014
			Motor Vehicle Crash Death Rate	CHR	2010–2016
		Education	Third-Grade Reading Level	California Department of Education	2017
			English Language Learners	California Department of Education	2017–2018
			Some College (Postsecondary Education)	CHR	2012–2016
			High School Graduation	CHR	2014–2015
		Employment	Unemployment Rate	CHR	2016
		Family and Social support	Children in Single-Parent Households	CHR	2012–2016
			Social Associations	CHR	2015

Conceptual Model Alignment			Indicator	Data Source	Time Period
		Income	Children Eligible for Free and Reduced Lunch	CHR	2015-2016
			Children in Poverty	CHR	2016
			Median Household Income	CHR	2016
			Uninsured	CHR	2015
	Physical Environment	Housing and Transit	Severe Housing Problems	CHR	2010–2014
			Households with No Vehicle	Census	2012–2016
			Access to Public Transit	Census/GTSF data	2010, 2012–2016, 2018
		Air and Water Quality	Pollution Burden Score	Cal-EnviroScreen	2017
			Air Pollution - Particulate Matter	CHR	2012
			Drinking Water Violations	CHR	2016

*County Health Rankings; further details in 20
** Vital Records Business Information System, Yolo County birth records
*** Institute for Health Metrics and Evaluation (IHME). United States Life Expectancy and Age-Specific Mortality Risk by County 1980-2014. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2017.
†California Department of Public Health
‡California Office of Statewide Health Planning and Development
§Health Resources and Services Administration

County Health Rankings Data

All indicators listed with County Health Rankings (CHR) as their source were obtained from the 2018 County Health Rankings[16] dataset. This was the most common source of data, with 38 associated indicators included in the analysis. Indicators were collected at both the county and state levels. County-level indicators were used to represent the health factors and health outcomes in the county. State-level indicators were collected to be used as benchmarks for comparison purposes. All variables included in the CHR dataset were obtained from other data providers. The original data providers for each CHR variable are given in Table 19.

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[16] Robert Wood Johnson Foundation. 2018. *County Health Rankings & Roadmaps*. Available online at: http://www.countyhealthrankings.org/. Accessed July 10, 2018.

Table 19: County Health Rankings data set, including indicators, the time period the data were collected, and the original source of the data

CHR Indicator	Time Period	Original Data Provider
Infant Mortality Rate	2010–2016	CDC WONDER Mortality Data
Child Mortality	2013–2016	CDC WONDER Mortality Data
Premature Age-Adjusted Mortality	2014–2016	CDC WONDER Mortality Data
Premature Death (Years of Potential Life Lost)	2014–2016	National Center for Health Statistics - Mortality Files
Diabetes Prevalence	2014	CDC Diabetes Interactive Atlas
HIV Prevalence Rate	2015	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Low Birth Weight	2010–2016	National Center for Health Statistics - Natality Files
Poor Mental Health Days	2016	Behavioral Risk Factor Surveillance System
Poor Physical Health Days	2016	Behavioral Risk Factor Surveillance System
Excessive Drinking	2016	Behavioral Risk Factor Surveillance System
Adult Obesity	2014	CDC Diabetes Interactive Atlas
Physical Inactivity	2014	CDC Diabetes Interactive Atlas
Limited Access to Healthy Foods	2015	USDA Food Environment Atlas
Access to Exercise Opportunities	2010 population/ 2016 facilities	Business Analyst, Delorme Map Data, ESRI, & U.S. Census Tiger Line Files
Sexually Transmitted Infections (Chlamydia Rate)	2015	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Teen Birth Rate	2010–2016	National Center for Health Statistics - Natality Files
Adult Smoking	2016	Behavioral Risk Factor Surveillance System
Healthcare Costs	2015	Dartmouth Atlas of Healthcare
Mammography Screening	2014	Dartmouth Atlas of Healthcare
Dentists	2016	Area Health Resource File/National Provider Identification File
Mental Health Providers	2017	CMS, National Provider Identification
Primary Care Physicians	2015	Area Health Resource File/American Medical Association
Preventable Hospital Stays (Ambulatory Care Sensitive Conditions)	2015	Dartmouth Atlas of Healthcare
Homicide Rate	2010–2016	CDC WONDER Mortality Data

CHR Indicator	Time Period	Original Data Provider
Violent Crime Rate	2012–2014	Uniform Crime Reporting - FBI
Motor Vehicle Crash Death Rate	2010–2016	CDC WONDER Mortality Data
Some College (Postsecondary Education)	2012–2016	American Community Survey, 5-Year Estimates
High School Graduation	2014–2015	California Department of Education
Unemployment Rate	2016	Bureau of Labor Statistics Local Area Unemployment Statistics
Children in Single-Parent Households	2012–2016	ACS 5-Year Estimates
Social Associations	2015	County Business Patterns
Children Eligible for Free Lunch	2015–2016	National Center for Education Statistics
Children in Poverty	2016	U.S. Census Bureau Small Area Income and Poverty Estimates
Median Household Income	2016	U.S. Census Bureau Small Area Income and Poverty Estimates
Uninsured	2015	U.S. Census Bureau Small Area Health Insurance Estimates
Severe Housing Problems	2010–2014	HUD Comprehensive Housing Affordability Strategy (CHAS) Data
Air Pollution - Particulate Matter	2012	CDC's National Environmental Public Health Tracking Network
Drinking Water Violations	2016	Safe Drinking Water Information System

CDPH Data

The next most common source of health-outcome and health-factor variables used for health need identification was California Department of Public Health (CDPH). This includes the same by-cause mortality rates as those described previously. But in this case, they were calculated at the county level to represent health conditions in the county and at the state level to be used as comparative benchmarks. County-level rates were smoothed using the same process described previously. State-level rates were not smoothed.

Drug overdose deaths and age-adjusted mortality rates were also obtained from CDPH. These indicators report age-adjusted drug-induced death rates and age-adjusted all-cause mortality

rates for counties and the state from 2014 to 2016 as reported in the 2018 County Health Status Profiles.[17]

HRSA Data

Indicators related to the availability of healthcare providers were obtained from the Health Resources and Services Administration[18] (HRSA). These included Dental, Mental Health, and Primary Care Health Professional Shortage Areas and Medically Underserved Areas/Populations. They also included the number of specialty care providers and psychiatrists per 100,000 residents, derived from the county-level Area Health Resource Files.

The health professional shortage area and medically underserved area data were not provided at the county level. Rather, they are shown as all areas in the state that were designated as shortage areas. These areas could include a portion of a county or an entire county, or they could span multiple counties. To develop measures at the county level to match the other health-factor and health-outcome indicators used in health need identification, these shortage areas were compared to the boundaries of each county in the state. Counties that were partially or entirely covered by a shortage area were noted.

The HRSA's Area Health Resource Files provide information on physicians and allied healthcare providers for U.S. counties. This information was used to determine the rate of specialty care providers and the rate of psychiatrists for each county and for the state. For the purposes of this analysis, a specialty care provider was defined as a physician who was not defined by the HRSA as a primary care provider. This was found by subtracting the total number of primary care physicians (both MDs and DOs, primary care, patient care, and nonfederal, excluding hospital residents and those 75 years of age or older) from the total number of physicians (both MDs and DOs, patient care, nonfederal) in 2015. This number was then divided by the 2015 total population given in the 2015 American Community Survey 5-year Estimates table B01003, and then multiplied by 100,000 to give the total number of specialty care physicians per 100,000 residents. The total of specialty care physicians in each county was summed to find the total specialty care physicians in the state, and state rates were calculated following the same approach as used for county rates. This same process was also used to calculate the number of psychiatrists per 100,000 for each county and the state using the number of total patient care, nonfederal psychiatrists from the Area Health Resource Files. It should be noted that psychiatrists are included in the list of specialty care physicians, so that indicator represents a subset of specialty care providers rather than a separate group.

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[17] California Department of Public Health. 2018. *County Health Status Profiles 2018*. Available online at: https://www.cdph.ca.gov/Programs/CHSI/Pages/County-Health-Status-Profiles.aspx. Last accessed October 23, 2018.

[18] Health Resources and Services Administration. 2018. Data Downloads, Available online at: https://data.hrsa.gov/data/download. Last accessed June 19 2018 (for county level Area Health Resource Files) and 1 August 2018 (for Health Professional Shortage Area files)

California Cancer Registry Data

Data obtained from the California Cancer Registry[19] includes age-adjusted incidence rates for colon and rectum, female breast, lung and bronchus, and prostate cancer sites for counties and the state. Reported rates were based on data from 2010 to 2014, and report cases per 100,000. For low-population counties, rates were calculated for a group of counties rather than for individual counties. That group rate was used in this report to represent incidence rates for each individual county in the group.

Census Data

Data from the U.S. Census Bureau were used to calculate three additional indicators: the percentage of households with no vehicle available, the percentage of the civilian noninstitutionalized population with some disability, and the Modified Retail Food Environment Index (mRFEI). The sources for the indicators used are given in Table 20.

Table 20: Detailed description of data used to calculate percentage of population with disabilities, households without a vehicle, and the Modified Retail Food Environment Index (mRFEI)

Indicator	Source Data Table	Variable	NAICS code	Employee Size Category	Data Source
Percentage with Disability	S1810	HC03_EST_VC01			2016 American Community Survey 5-Year Estimates
Households with No Vehicle Available	DP04	HC03_VC85			
Large Grocery Stores	BP_2016_00A3	Number of Establishments	445110	10 or More Employees	2016 County Business Patterns
Fruit and Vegetable Markets	BP_2016_00A3	Number of Establishments	445230	All Establishments	
Warehouse Clubs	BP_2016_00A3	Number of Establishments	452910	All Establishments	
Small Grocery Stores	BP_2016_00A3	Number of Establishments	445110	1 to 4 Employees	
Limited-Service Restaurants	BP_2016_00A3	Number of Establishments	722513	All Establishments	
Convenience Stores	BP_2016_00A3	Number of Establishments	445120	All Establishments	

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[19] California Cancer Registry. 2018. *Age-Adjusted Invasive Cancer Incidence Rates in California*. Available online at: https://www.cancer-rates.info/ca/. Accessed: May 11, 2018.

The mRFEI indicator reports the percentage of the total food outlets in a ZCTA that are considered healthy food outlets. The mRFEI indicator was calculated using a modification of the methods described by the National Center for Chronic Disease Prevention and Health Promotion[20] using data obtained from the U.S. Census Bureau's 2016 County Business Pattern datasets.

Healthy food retailers were defined based on North American Industrial Classification Codes (NAICS), and included large grocery stores, fruit and vegetable markets, and warehouse clubs. Food retailers that were considered less healthy included small grocery stores, limited-service restaurants, and convenience stores.

To calculate the mRFEI, the total number of health food retailers was divided by the total number of healthy and less healthy food retailers, and the result was multiplied by 100 to calculate the final mRFEI value for each county and for the state.

CalEnviroScreen Data

CalEnviroScreen[21] is a dataset produced by CalEPA. It includes multiple indicators associated with various forms of pollution for census tracts within the state. These include multiple measures of air and water pollution, pesticides, toxic releases, traffic density, cleanup sites, groundwater threats, hazardous waste, solid waste, and impaired bodies of water. One indicator, pollution burden, combines all of these measures to generate an overall index of pollution for each tract. To generate a county-level pollution-burden measure, the percentage of the population residing in census tracts with pollution-burden scores greater than or equal to the 50th percentile was calculated for each county as well as for the state.

Google Transit Feed Specification (GTFS) Data

The final indicator used to identify significant health needs measures was proximity to public transportation. This indicator reports the percentage of a county's population that lives in a census block located within a quarter mile of a fixed transit stop. Census block data from 2010 (the most recent year available) was used to measure population.

An extensive search was conducted to identify stop locations for transportation agencies in the service area. Many transportation agencies publish their route and stop locations using the standard GTFS data format. Listings for agencies covering the service area were reviewed at TransitFeeds (https://transitfeeds.com) and Trillium (https://trilliumtransit.com/gtfs/our-work/). These were compared to the list of feeds used by Google Maps (https://www.google.com/landing/transit/cities/index.html#NorthAmerica) to try to maximize coverage.

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[20] National Center for Chronic Disease Prevention and Health Promotion. (2011). *Census Tract Level State Maps of the Modified Retail Food Environment Index (mRFEI).* Centers for Disease Control. Retrieved Jan 11, 2016, from http://ftp.cdc.gov/pub/Publications/dnpao/census-tract-level-state-maps-mrfei_TAG508.pdf

[21] CalEPA. 2018. CalEnviroscreen 3.0 Shapefile. Available online at: https://data.ca.gov/dataset/calenviroscreen-30. Last accessed: May 26, 2018.

Table 21 notes the agencies for which transit stops could be obtained. It should be noted that while every attempt was made to include as comprehensive a list of data sources as possible, there may be transit stops associated with agencies not included in this list in the county. Caution should therefore be used in interpreting this indicator.

Table 21: Transportation agencies used to compile the proximity to public transportation indicator

County	Agency
Solano	SoTrans, Delta Breeze (Rio Vista), Fairfield and Suisun Transit (FAST)
Sacramento County	SacRT, Elk Grove e-Trans, Folsom Stage Line (doesn't include South County Transit)
Yolo	YoloBus, Unitrans

Descriptive Socioeconomic and Demographic Data

The final secondary data set used in this analysis was comprised of multiple socioeconomic and demographic indicators collected at the ZCTA, county, and state level. These data were not used in an analytical context. Rather, they were used to provide a description of the overall population characteristics within the county. Table 22 lists each of these indicators as well as their sources.

Table 22: Descriptive socioeconomic and demographic data descriptions

Indicator	Description	Source Data Table	Variables Included
Population	Total population	DP05	HC01_VC03
Minority	The percentage of the population that is Hispanic or reports at least one race that is not white	B0302	HD01_VD01, HD01_VD03
Median Age	Median age of the population	DP05	HC01_VC23
Median Income	Median household income	S2503	HC01_EST_VC14
Poverty	Percentage of population below the poverty level	S1701	HC03_EST_VC01
Unemployed	Unemployment rate among the population 16 or older	S2301	HC04_EST_VC01
Uninsured	Percentage of population without health insurance	S2701	HC05_EST_VC01
Not a High School Graduate	Percentage of population over 25 that are not high school graduates	S1501	HC02_EST_VC17

Indicator	Description	Source Data Table	Variables Included
High Housing Costs	Percentage of the population for whom total housing costs exceed 30% of income	S2503	HC01_EST_VC33, HC01_EST_VC37, HC01_EST_VC41, HC01_EST_VC45, HC01_EST_VC49
Disability	Percentage of civilian noninstitutionalized population with a disability	S1810	HC03_EST_VC01

Detailed Analytical Methodology

The collected and processed primary and secondary data were integrated in three main analytical stages. In the first stage, secondary health-outcome and health-factor data were combined with primary data collected from key informant interviews providing an overall view of the county to identify Communities of Concern. These Communities of Concern potentially included geographic regions and specific subpopulations, in which certain populations bear disproportionate health burdens. The identified Communities of Concern are then used to focus the remaining interview and focus group collection efforts on those areas and subpopulations. The resulting data is then combined with survey results and secondary health need identification data to identify significant health needs within the service area. Finally, primary data (focus group, interview, and survey results) is used to prioritize those identified significant health needs. The specific details for these analytical steps are given in the following three sections.

Community of Concern Identification
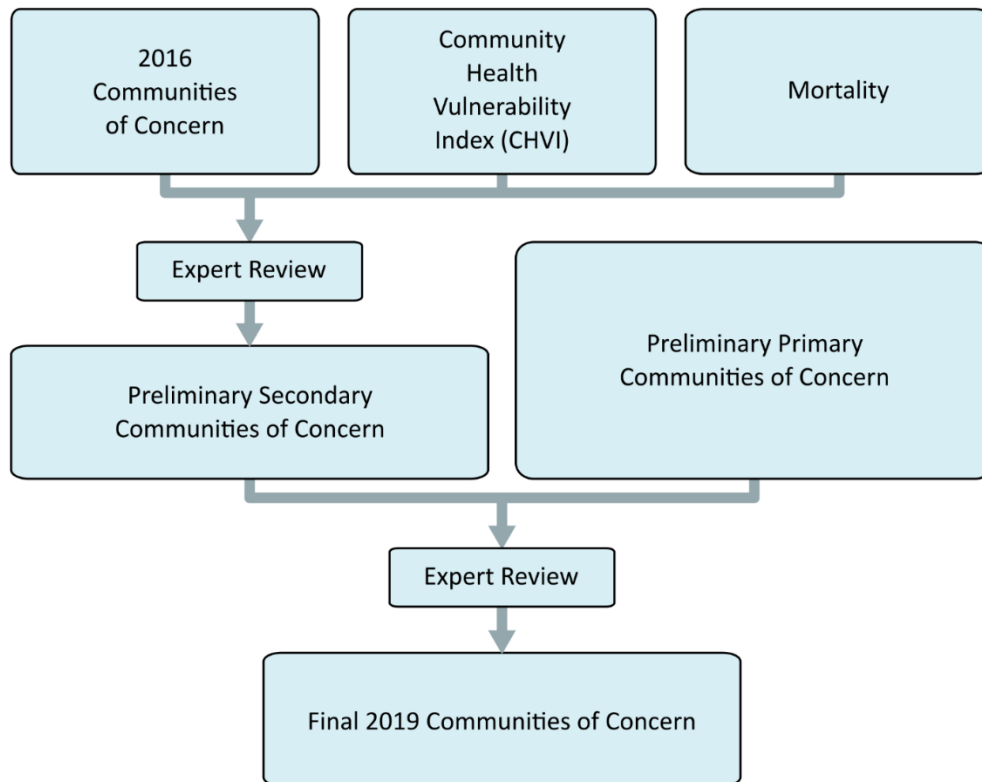
Figure 16: Process followed to identify Communities of Concern

As illustrated in Figure 16, the 2019 Communities of Concern were identified through a process that drew upon both primary and secondary data. Three main secondary data sources were used in this analysis: Communities of Concern identified in the 2016 CHNA; the census tract–level Community Health Vulnerability Index (CHVI); and the CDPH ZCTA-level mortality data.

An evaluation procedure was developed for each of these data sets and applied to each ZCTA within the county. The following secondary data selection criteria were used to identify preliminary Communities of Concern.

2016 Community of Concern
The ZCTA was included in the 2016 CHNA Community of Concern list for the hospital service areas of both Sutter Davis Hospital and Woodland Memorial Hospital. This was done to allow greater continuity between the 2016 CHNA round and the current assessment, and it reflects the work of the partners to serve these disadvantaged communities.

Community Health Vulnerability Index (CHVI)
The ZCTA intersected a census tract whose CHVI value fell within the most vulnerable (highest 20%) of the county. Census tracts with these values represent areas with consistently high

concentrations of demographic subgroups identified in the research literature as being more likely to experience health-related disadvantages.

Mortality

The review of ZCTAs based on mortality data utilized the ZCTA-level CDPH health-outcome indicators described previously. These indicators were heart disease, cancer, stroke, CLD, Alzheimer's disease, unintentional injuries, diabetes, influenza and pneumonia, chronic liver disease, hypertension, suicide, and kidney disease mortality rates per 100,000 people, and infant mortality rates per 1,000 live births. The number of times each ZCTA's rates for these indicators fell within the most vulnerable (highest 20%) in the county was counted. Those ZCTAs whose counted values exceeded the 80th percentile for all of the ZCTAs in the county met the Community of Concern mortality selection criteria.

Integration of Secondary Criteria

Any ZCTA that met any of the three selection criteria (2016 community of concern, CHVI, and mortality) was reviewed for inclusion as a 2019 community of concern, with greater weight given to those ZCTAs meeting two or more of the selection criteria. An additional round of expert review was applied to determine if any other ZCTAs not thus far indicated should be included based on some other unanticipated secondary data consideration. This list then became the final preliminary secondary Communities of Concern.

Preliminary Primary Communities of Concern

Preliminary primary Communities of Concern were identified by reviewing the geographic locations or population subgroups that were consistently identified by the area-wide primary data sources.

Integration of Preliminary Primary and Secondary Communities of Concern

Any ZCTA that was identified in either the preliminary primary or secondary community of concern list was considered for inclusion as a 2019 community of concern. An additional round of expert review was then applied to determine if, based on any primary or secondary data consideration, any final adjustments should be made to this list. The resulting set of ZCTAs was then used as the final 2019 Communities of Concern.

Significant Health Need Identification

The general methods through which significant health needs (SHNs) were identified are shown in Figure 17 and described here in greater detail. The first step in this process was to identify a set of potential health needs (PHNs) from which significant health needs could be selected. This was done by reviewing the health needs identified during the 2016 CHNA among various hospitals throughout northern California and then supplementing this list based on a preliminary analysis of the primary qualitative data collected for the 2019 CHNA. This resulted in a list of 10 PHNs for the county, shown in Table 23.
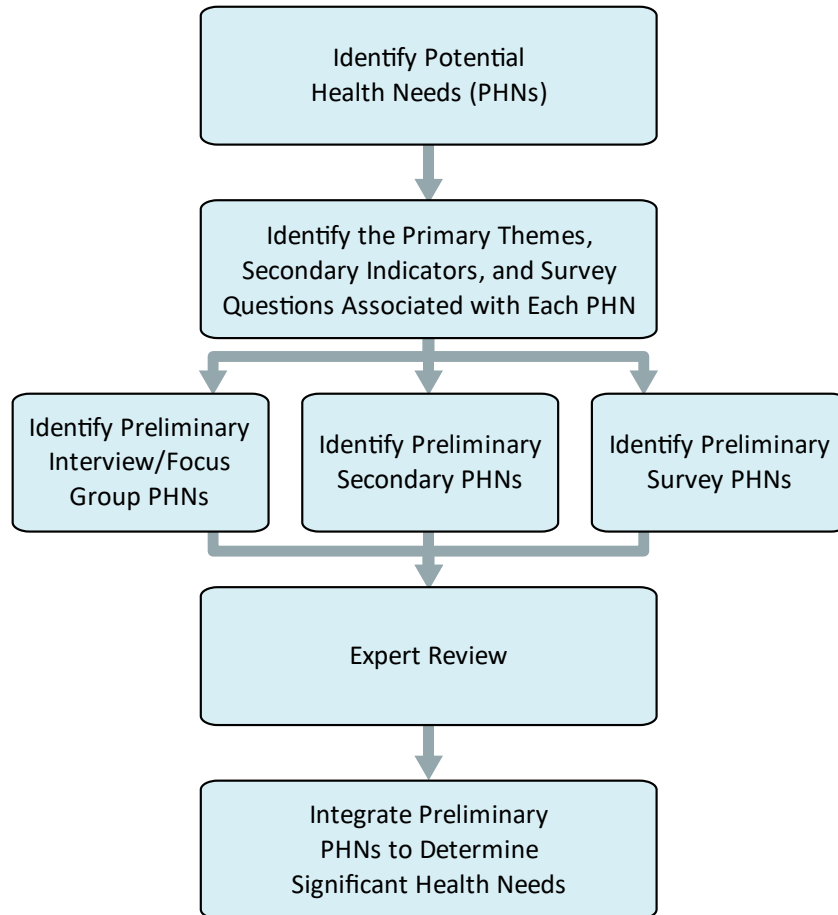
Figure 17: Process followed to identify Significant Health Needs

Table 23: Potential health needs

2019 Potential Health Needs (PHNs)	
PHN1	Access to Mental/Behavioral/Substance Abuse Services
PHN2	Access to Quality Primary Care Health Services
PHN3	Active Living and Healthy Eating
PHN4	Safe and Violence-Free Environment
PHN5	Access to Dental Care and Preventive Services
PHN6	Pollution-Free Living Environment
PHN7	Access to Basic Needs such as Housing, Jobs, and Food
PHN8	Access and Functional Needs
PHN9	Access to Specialty and Extended Care
PHN10	Injury and Disease Prevention and Management

The next step in the process was to identify primary themes, secondary indicators, and survey questions associated with each of these health needs as shown in Table 24. Primary theme associations were used to guide coding of the primary data sources to specific PHNs.

Table 24: Primary theme, secondary indicator, and survey question associations used to identify significant health needs

Health Need Number	2019 CHI Potential Health Needs	2019 CHI Secondary Indicators	Primary Indicators	Survey Questions
PHN1	Access to Mental/ Behavioral/ Substance Abuse Services	• Life Expectancy at Birth • Liver Disease Mortality • Suicide Mortality • Poor Mental Health Days • Poor Physical Health Days • Drug Overdose Deaths • Excessive Drinking • Health Professional Shortage Area – Mental Health • Mental Health Providers • Psychiatrists • Social Associations • Liver Cancer Incidence • Mental Health/Drug Related Hospitalizations • Hospitalizations for Self-Inflicted Injuries in Youth • Mental Health Hospitalizations in Youth	• Self-Injury • Mental Health and Coping Issues • Substance Abuse • Smoking • Stress • Mentally Ill and Homeless • PTSD • Access to Psychiatrist • Homelessness	• Have you ever been told by a doctor that you have cancer? (Q17c) • Have you ever been told you have mental illness? (Q17g) • Have you ever been told you have a drug or alcohol problem? (Q17h) • Needed behavioral health care in past 12 months (Q18) • Needed behavioral health care but didn't get it because of cost (Q18b-a) • Needed behavioral health care but didn't get it because of lack of comfort talking about it (Q18b-b) • Needed behavioral health care but didn't get it because of stigma (Q18b-c) • Needed behavioral health care but didn't get it because of appt. availability(Q18b-e) • Needed behavioral health care but didn't get it because didn't

Health Need Number	2019 CHI Potential Health Needs	2019 CHI Secondary Indicators	Primary Indicators	Survey Questions
				know where to go(Q18b-f)
PHN2	Access to Quality Primary	• Life Expectancy at Birth • Cancer Mortality	• Issue of Quality of Care • Access to Care	• Have you ever been told you have cancer? (Q17c)

| | Care Health Services | • Child Mortality
• Chronic Lower Respiratory Disease Mortality
• Diabetes Mortality
• Heart Disease Mortality
• Hypertension Mortality
• Influenza and Pneumonia Mortality
• Kidney Disease Mortality
• Liver Disease Mortality
• Stroke Mortality
• Breast Cancer Incidence
• Colorectal Cancer Incidence
• Diabetes Prevalence
• Low Birth Weight
• Lung Cancer Incidence
• Prostate Cancer Incidence
• Healthcare Costs
• Health Professional Shortage Area – Primary Care
• Medically Underserved Areas
• Mammography Screening
• Primary Care Physicians
• Preventable Hospital Stays | • Health Insurance
• Care for Cancer/Cancer Occurrence
• Indicators in PQI: Diabetes, COPD, CLD, Hypertension (HTN), Heart Disease (HTD), Asthma, Pneumonia | • Have you ever been told you have diabetes? (Q17d)
• Have you ever been told you have heart disease? (Q17e)
• Have you ever been told you have hypertension? (Q17f)
• Takes more than 30 minutes to get to doctor (Q22)
• Unsatisfied or very unsatisfied with getting an appointment quickly (Q24)
• Didn't receive medical screenings because it took too long (Q26a-a)
• Didn't receive medical screenings because of language issues (Q26a-c)
• Didn't receive medical screenings because of clinic hours (Q26a-e)
• Didn't receive medical screenings because of doctor availability (Q26a-f)
• Didn't receive medical screenings because of inadequate insurance (Q26a-h)
• Didn't receive medical screenings because of lack of trust with providers (Q26a-j) |

Health Need Number	2019 CHI Potential Health Needs	2019 CHI Secondary Indicators	Primary Indicators	Survey Questions
		- Percentage Uninsured - Prenatal Care (1st Trimester) - Liver Cancer Incidence - Hospitalizations for Diabetes, Long-Term Complications - Preterm Births - ED Visits for Asthma - Colon Cancer Hospitalizations		- Went to ER because I couldn't get urgent care appt. (Q27-b) - Went to ER for prescription refill (Q27-e) - Went to ER because more convenient (Q27-f) - Went to ER because lack usual source of care (Q27-g)
PHN3	Active Living and Healthy Eating	- Cancer Mortality - Diabetes Mortality - Heart Disease Mortality - Hypertension Mortality - Kidney Disease Mortality - Stroke Mortality - Breast Cancer Incidence - Colorectal Cancer Incidence - Diabetes Prevalence - Prostate Cancer Incidence - Limited Access to Healthy Foods - mRFEI - Access to Exercise Opportunities - Physical Inactivity	- Food Access/Insecurity - Community Gardens - Fresh Fruits and Veggies - Distance to Grocery Stores - Food Deserts - Chronic Disease Outcomes Related to Poor Eating - Diabetes, HTD, HTN, Stroke, Kidney issues, Cancer - Access to Parks - Places to be Active	- Have you ever been told you have cancer? (Q17c) - Have you ever been told you have diabetes? (Q17d) - Have you ever been told you have heart disease? (Q17e) - Have you ever been told you have hypertension? (Q17f) - Have you ever been told that you have obesity/overweight? (Q17j)

Health Need Number	2019 CHI Potential Health Needs	2019 CHI Secondary Indicators	Primary Indicators	Survey Questions
		• Adult Obesity • Breastfeeding Rate (Exclusive In-Hospital) • Hospitalizations for Diabetes, Long-Term Complications • Colon Cancer Hospitalizations		
PHN4	Safe and Violence-Free Environment	• Life Expectancy at Birth • Poor Mental Health Days • Homicide Rate • Motor Vehicle Crash Death Rate • Violent Crime Rate • Social Associations • Mental Health/Drug-Related Hospitalizations • Hospitalizations for Self-Inflicted Injuries in Young Adults • Mental Health Hospitalizations in Youth (<18)	• Crime Rates • Violence in The Community • Feeling Unsafe in The Community • Substance Abuse- Alcohol and Drugs • Access to Safe Parks • Pedestrian Safety • Safe Streets • Safe Places to Be Active	• Have you ever been told you have mental illness? (Q17g) • Have you ever been told you have a drug or alcohol problem? (Q17h)

Health Need Number	2019 CHI Potential Health Needs	2019 CHI Secondary Indicators	Primary Indicators	Survey Questions
PHN5	Access to Dental Care and Preventive Services	• Dentists per population • Health Professional Shortage Area – Dental • ED Visits by Children with Dental Diagnosis • ED Visits by Adults with Dental Diagnosis	• Any Issues Related to Dental Health • Access to Dental Care	• Do you have dental insurance? (Q28) • Been to dentist in last 12 months (Q28)
Health Need Number	2019 CHI Potential Health Needs	2019 CHI Secondary Indicators	Primary Indicators	Survey Questions
PHN6	Pollution-Free Living Environment	• Cancer Mortality • Chronic Lower Respiratory Disease Mortality • Breast Cancer Incidence • Colorectal Cancer Incidence • Lung Cancer Incidence • Prostate Cancer Incidence • Adult Smoking • Air Pollution – Particulate Matter • Drinking Water Violations • Pollution Burden • ED Visits for Asthma	• Smoking • Unhealthy Air, Water, Housing • Health Issues: Asthma, COPD, CLRD, Lung Cancer	• Have you ever been told you have asthma/lung disease/COPD/ emphysema? (Q17a) • Have you ever been told you have cancer? (Q17c)

Health Need Number	2019 CHI Potential Health Needs	2019 CHI Secondary Indicators	Primary Indicators	Survey Questions
PHN7	Access to Meeting Basic Needs Such as Housing, Jobs, and Food	• Life Expectancy at Birth • Infant Mortality • Age-Adjusted All-Cause Mortality • Child Mortality • Premature Age-Adjusted Mortality • Premature Death (Years of Potential Life Lost) • Low Birth Weight • Medically Underserved Areas • Healthcare Costs • High School Graduation • Some College (Postsecondary Education) • Unemployment • Children in Single-Parent Household • Social Associations • Children Eligible for Free or Reduced Lunch • Children in Poverty • Median Household Income • Uninsured • Severe Housing Problems	• Employment and Unemployment • Poverty • Housing Issues • Homelessness • Education Access • Community Quality of Life • Housing Availability • Housing Affordability	• Have you ever been told you have asthma/lung disease/COPD/ emphysema? (Q17a) • Have you ever been told that you have obesity/overweight? (Q17j) • Needed behavioral health care but didn't get it because of lack of insurance coverage (Q18b-d) • Do you have health insurance? (Q19-NO) • Didn't receive medical screenings because of lack of health insurance (Q26a-g)

		• Households with No Vehicle • mRFEI • Limited Access to Healthy Food • Breastfeeding Rate (Exclusive in Hospital) • Third-Grade Reading Level • English Language Learners • ED Visits for Asthma		
Health Need Number	**2019 CHI Potential Health Needs**	**2019 CHI Secondary Indicators**	**Primary Indicators**	**Survey Questions**
PHN8	Access and Functional Needs	• Access to Public Transportation • Households with no Vehicle • Percentage of Population with a Disability	• Physical Access Issues • Cost of Transportation • Ease of Transportation Access • No Car • Disability	• Do you have a condition that limits one or more physical activities? (Q16) • Have you ever been told you have a physical disability? (Q17i) • Didn't receive medical screenings because of transportation (Q26a-d)
Health Need Number	**2019 CHI Potential Health Needs**	**2019 CHI Secondary Indicators**	**Primary Indicators**	**Survey Questions**
PHN9	Access to Specialty and Extended Care	• Life Expectancy at Birth • Alzheimer's Mortality • Cancer Mortality • Chronic Lower Respiratory Disease Mortality	• Seeing a Specialist for Health Conditions • Diabetes-Related Specialty Care • Specialty Care for HTD, HTN,	• Have you ever been told you have cancer? (Q17c) • Have you ever been told you have diabetes? (Q17d)

Health Need Number	2019 CHI Potential Health Needs	2019 CHI Secondary Indicators	Primary Indicators	Survey Questions
		• Diabetes Mortality • Heart Disease Mortality • Hypertension Mortality • Kidney Disease Mortality • Liver Disease Mortality • Stroke Mortality • Diabetes Prevalence • Lung Cancer Incidence • Psychiatrists • Specialty Care Providers • Preventable Hospital Stays • Liver Cancer Incidence • Colon Cancer Hospitalizations	Stroke, Kidney Diseases	• Have you ever been told you have heart disease? (Q17e) • Have you ever been told you have hypertension? (Q17f)
PHN10	Injury and Disease Prevention and Management	• Infant Mortality • Alzheimer's Mortality • Child Mortality • Chronic Lower Respiratory Disease Mortality • Diabetes Mortality • Heart Disease Mortality • Hypertension Mortality	• Anything Related to Helping Prevent a Preventable Disease or Injury • Unintentional Injury • Smoking and Alcohol/Drug Abuse • Teen Pregnancy • HIV/STD • Tuberculosis (TB) • Influenza and Pneumonia	• Have you ever been told you have asthma/lung disease/COPD/ emphysema? (Q17a) • Have you ever been told you have autoimmune disease (Lupus, Type 1 diabetes)? (Q17b) • Have you ever been told you have cancer? (Q17c)

		• Influenza and Pneumonia Mortality • Kidney Disease Mortality • Liver Disease Mortality • Stroke Mortality • Suicide Mortality • Unintentional Injury Mortality • Diabetes Prevalence • HIV Prevalence Rate • Low Birth Weight • Drug Overdose Deaths • Excessive Drinking • Adult Obesity • Physical Inactivity • Sexually Transmitted Infections (Chlamydia) Rate • Teen Birth Rate • Adult Smoking • Motor Vehicle Crash Death Rate • Breastfeeding Rate (Exclusive In-Hospitals) • Prenatal Care (1st Trimester) • Hospitalizations for Diabetes, Long-Term Complications • Liver Cancer Incidence • ED Visits for Asthma	• Health Classes • Health Promotion Teams and Interventions • Need for Health Literacy	• Have you ever been told you have diabetes? (Q17d) • Have you ever been told you have heart disease? (Q17e) • Have you ever been told you have hypertension? (Q17f) • Have you ever been told you have mental illness? (Q17g) • Have you ever been told you have a drug or alcohol problem? (Q17h) • Have you ever been told that you have obesity/overweight? (Q17j)

		- Mental Health/Drug Related Hospitalizations - Hospitalizations for Self-Inflicted Injuries in Young Adults - Mental Health Hospitalizations in Youth (<18) - ED Visits Due to falls Age 65+ - Hospitalization Due to Falls Age 65+ - Colon Cancer Hospitalization		

Next, values for the secondary health-factor and health-outcome indicators identified were compared to state benchmarks to determine if a secondary indicator performed poorly within the county. Some indicators were considered problematic if they exceeded the benchmark, others were considered problematic if they were below the benchmark, and the presence of certain other indicators within the county, such as health professional shortage areas, indicated issues. Table 25 lists each secondary indicator and describes the comparison made to the benchmark to determine if it was problematic.

Table 25: Benchmark comparisons to show indicator performance for Yolo County CHNA/CHA indicators

Indicator	Benchmark Comparison Indicating Poor Performance
Years of Potential Life Lost	Higher
Poor Physical Health Days	Higher
Poor Mental Health Days	Higher
Low Birth Weight	Higher
Adult Smokers	Higher
Adult Obesity	Higher
Physical Inactivity	Higher
Access to Exercise	Lower
Excessive Drinking	Higher
STI Chlamydia Rate	Higher
Teen Birth Rate	Higher
Uninsured	Higher
Primary Care Physicians	Lower
Dentists	Lower
Mental Health Providers	Lower
Preventable Hospital Stays	Higher
Mammography Screening	Lower
High School Graduation	Lower
Some College	Lower
Unemployed	Higher
Children in Poverty	Higher
Children with Single Parents	Higher
Social Associations	Lower
Violent Crimes	Higher
Air Particulate Matter	Higher
Drinking Water Violations	Present
Severe Housing Problems	Higher
Premature Age-Adjusted Mortality	Higher
Child Mortality	Higher
Infant Mortality	Higher
Diabetes Prevalence	Higher
HIV Prevalence	Higher
Limited Access to Healthy Food	Higher
Motor Vehicle Crash Deaths	Higher
Healthcare Costs	Higher
Median Household Income	Lower
Free or Reduced Lunch	Higher

Homicides	Higher
Cancer Female Breast	Higher
Cancer Colon and Rectum	Higher
Cancer Lung and Bronchus	Higher
Cancer Prostate	Higher
Drug Overdose Deaths	Higher
HPSA Dental Health	Present
HPSA Mental Health	Present
HPSA Primary Care	Present
HPSA Medically Underserved Area	Present
mRFEI	Lower
Housing Units with No Vehicle	Higher
Specialty Care Providers	Lower
Psychiatry Providers	Lower
Cancer Mortality	Higher
Heart Disease Mortality	Higher
Unintentional Injury Mortality	Higher
CLD Mortality	Higher
Stroke Mortality	Higher
Alzheimer's Mortality	Higher
Diabetes Mortality	Higher
Suicide Mortality	Higher
Hypertension Mortality	Higher
Influenza Pneumonia Mortality	Higher
Kidney Disease Mortality	Higher
Liver Disease Mortality	Higher
Life Expectancy	Lower
Age-Adjusted Mortality	Higher
Pollution Burden	Higher
Public Transit Proximity	Lower
Percentage with Disability	Higher

Survey-question response rates were similarly compared to relevant benchmarks to determine which identified issues within the county. Most benchmarks were drawn from related state-level surveys. State benchmarks did not exist for some of the survey questions used. Various strategies were used to identify benchmarks for these questions, including comparing them to rates collected in previous county surveys, or picking arbitrary but reasonable standards. Table 26 shows the direction of comparison used to compare each survey question to its related benchmark.

Table 26: Benchmark comparisons for Yolo County CHNA/CHA survey questions

County	Direction
Do you have a condition that limits one or more physical activities?	Higher
Have you ever been told you have asthma/lung disease/COPD/emphysema?	Higher
Have you ever been told you have autoimmune disease (Lupus, Type 1 diabetes)?	Higher
Have you ever been told you have cancer?	Higher
Have you ever been told you have diabetes?	Higher
Have you ever been told you have heart disease	Higher
Have you ever been told you have hypertension?	Higher
Have you ever been told you have mental illness?	Higher
Have you ever been told you have a drug or alcohol problem?	Higher
Have you ever been told you have a physical disability?	Higher
Have you ever been told that you have obesity/overweight?	Higher
Needed behavioral health care in past 12 months	Higher
Needed behavioral health care but didn't get it because of cost	Higher
Needed behavioral health care but didn't get it because of lack of comfort talking about it	Higher
Needed behavioral health care but didn't get it because of stigma	Higher
Needed behavioral health care but didn't get it because of lack of insurance coverage	Higher
Needed behavioral health care but didn't get it because appointment availability	Higher
Needed behavioral health care but didn't get it because didn't know where to go	Higher
Do you have health insurance? (Response: No)	Higher
Takes more than 30 minutes to get to doctor	Higher
Unsatisfied or very unsatisfied with getting an appointment quickly	Higher
Didn't receive medical screenings because it took too long	Higher
Didn't receive medical screenings because of language issues	Higher
Didn't receive medical screenings because of transportation	Higher

Didn't receive medical screenings because of clinic hours	Higher
Didn't receive medical screenings because of doctor availability	Higher
Didn't receive medical screenings because of lack of health insurance	Higher
Didn't receive medical screenings because of inadequate insurance	Higher
Didn't receive medical screenings because of lack of trust with providers	Higher
Went to ER because I couldn't get urgent care appt.	Higher
Went to ER for prescription refill	Higher
Went to ER because more convenient	Higher
Went to ER because lack usual source of care	Higher
Do you have dental insurance? (Response: Yes)	Lower
Been to dentist in last 12 months (Response: Yes)	Lower

Once these poorly performing quantitative indicators were identified, they were used to identify preliminary secondary significant health needs. This was done by calculating the percentage of all secondary indicators associated with a given PHN that were identified as performing poorly within the county. While all PHNs represented actual health needs within the county to a greater or lesser extent, a PHN was considered a preliminary secondary health need if the percentage of poorly performing indicators exceeded one of a number of established thresholds: any poorly performing associated secondary indicators; or at least 20%, 25%, 33%, 40%, 50%, 60%, 66%, 75%, or 80% of the associated indicators were found to perform poorly. These thresholds were chosen because they correspond to divisions of the indicators into fifths, quarters, thirds, or halves. A similar set of standards was used to identify the preliminary interview and focus group health needs: any of the survey respondents mentioned a theme associated with a PHN, or if at least 20%, 25%, 33%, 40%, 50%, 60%, 66%, 75%, or 80% of the respondents mentioned an associated theme. Finally, the same basic set of standards was used to identify preliminary survey health needs: any poorly performing survey question; or at least 20%, 25%, 33%, 40%, 50%, 60%, 66%, 75%, or 80% of the associated survey questions were found to perform poorly.

These sets of criteria (any mention, 20%, 25%, 33%, 40%, 50%, 60%, 66%, 75%, or 80%) were used because we could not anticipate which specific standard would be most meaningful within the context of the county. Having multiple objective decision criteria allows the process to be more easily described but still allows for enough flexibility to respond to evolving conditions in the county. To this end, a final round of expert reviews was used to compare the set selection criteria to find the level at which the criteria converged towards a final set of SHNs. Once the final criteria used to identify the SHN were selected for the interview and focus groups, survey,

and secondary analyses, any PHN included in any preliminary health need list was included as a final significant health need for the county.

For this Yolo County report, a PHN was selected as a preliminary secondary significant health need if one of the following criteria was met: 50% of the associated indicators were identified as performing poorly, the need was identified by 50% or more of the sources as performing poorly, or survey questions assigned to the need were flagged.

Health Need Prioritization

Once identified for the county, the final set of SHNs was prioritized. To reflect the voice of the community, significant health need prioritization was based solely on primary data. Key informants and focus group participants were asked to identify the three most significant health needs in their communities. These responses were associated with one or more of the potential health needs. This, along with the responses across the rest of the interviews and focus groups, was used to derive two measures for each significant health need.

First, the total percentage of all primary data sources that mentioned themes associated with a significant health need at any point was calculated. This number was taken to represent how broadly a given significant health need was recognized within the community. Next, the percentage of times a theme associated with a significant health was mentioned as one of the top three health needs in the community was calculated. Since primary data sources were asked to prioritize health needs in this question, this number was taken to represent the intensity of the need.

Survey responses provided a final method to include community voice within the prioritization process. Survey respondents were asked (in three separate questions) to identify the three biggest health issues that most affect the community, the three individual behaviors most responsible for health issues in the community, and the three environmental issues most responsible for health issues in the community. Respondents were able to select from a list of issues or write in their own. All responses selected by at least 20% of respondents were identified for each of these questions, and these responses were coded to the PHNs as show in Table 27 below. A final measure was calculated by dividing the total number of times a response associated with a given health need was found by the total number of responses indicated by at least 20% of survey respondents.

Table 27 Survey responses used in health need prioritization

Biggest Health Issues Affecting the Community	Associated Potential Health Needs
Alcoholism	1
Cancer	2, 3, 6
Diabetes	2, 3, 9, 10
Mental Health Issues	1
Obesity	3, 10

Individual Behaviors Most Responsible for the Health Issues	Associated Potential Health Needs
Alcohol Use	1
Drug Abuse	1, 10
Lack of Exercise	3, 10
Life Stress/Lack of Coping	1, 7
Poor Nutrition/Eating Habits	3
Environmental Issues Most Responsible for Health Issues	Associated Potential Health Needs
Cigarette Smoke	6, 10
Heat/Hot Days	7
Lack of Access To Healthy Foods	3
Poor Housing Conditions	7
Air Pollution	6

These three measures were next rescaled so that the SHN with the maximum value for each measure equaled one, the minimum equaled zero, and all other SHNs had values appropriately proportional to the maximum and minimum values. The rescaled values were then summed to create a combined SHN prioritization index. SHNs were ranked in descending order based on this index value so that the SHN with the highest value was identified as the highest-priority health need, the SHN with the second highest value was identified as the second-highest-priority health need, and so on.

Detailed List of Resources to Address Health Needs for Yolo County

Table 28: Resources potentially available to address significant health needs identified in the CHNA/CHA

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavioral/ substance abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence-free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs such as housing, jobs, and food	8. Access and functional needs	9. Access to specialty and extended care	10. Injury and disease prevention and management
211	Countywide	211Yolocounty.com	X	X	X	X	X	X	X	X	X	X
ACES – Yolo County office of Education	95776	ycoe.org/districts			X	X						
Agency on Again – Area 4	95815	agencyonaging4.org	X	X		X			X		X	X
All Leaders Must Serve	95776	allleadersmustserve.org							X			
Alternatives Pregnancy Center	95825	alternativespc.org	X	X								
Alzheimer's Association	95815	alz.org/norcal	X								X	X
American Cancer Society	95815	cancer.org		X							X	X
American Red Cross	95815	redcross.org		X					X			
Another Choice	95823	acacsac.org	X									

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavioral/ substance abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence-free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs such as housing, jobs, and food	8. Access and functional needs	9. Access to specialty and extended care	10. Injury and disease prevention and management
Another Chance												
ApexCare	95825	apexcare.com	X	X					X	X	X	
Big Brothers Big Sisters	95825	bbbs-sac.org	X			X						
Breathe California of Sacramento-Emigrant Trails	95814	sacbreathe.org		X				X				X
Bryte and Broderick Community Action Network	95605	bryteandbroderick.org			X				X	X		
California Accountable Communities for Health Initiative (CACHI)	95605	cachi.org		X					X			X
Capay Valley	95627	capayvalleyvision.net			X	X			X	X		
Cash Creek Conservancy	95695	cashcreekconservancy.org			X			X	X			

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavioral/ substance abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence-free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs such as housing, jobs, and food	8. Access and functional needs	9. Access to specialty and extended care	10. Injury and disease prevention and management
Children's Home Society of California – Woodland	95695	chs-ca.org							X			
Citizens Who Care	95695	citizenswhocare.us				X					X	
CommuniCare Health Centers	95605, 95616, 95627, 95695	communicarehc.org	X	X	X		X					X
Community Housing Opportunity Corp	95695	chochousing.org							X			
Davis Community Meals	95616	daviscommunitymeals.org							X			
Davis Community Transit	95616	cityofdavis.org								X		
Davis Senior Center	95616	cityofdavis.org		X	X	X			X		X	
Del Oro Caregiver	95610	deloro.org	X	X							X	X

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavioral/ substance abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence-free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs such as housing, jobs, and food	8. Access and functional needs	9. Access to specialty and extended care	10. Injury and disease prevention and management
Resource Center												
Dixon Migrant Farm Labor Camp	95620	ych.ca.gov							X			
Elica Health Centers	95691, 95816, 95818, 95825, 95838	elicahealth.org	X	X			X					
Empower Yolo	95695	empowerYolo.org	X			X			X			
Eskaton	95608	eskaton.org	X	X	X	X			X		X	
Explorit Science Center	95618	explorit.org							X			
First 5 Yolo	95618	first5Yolo.org	X	X	X				X			
First In, Relief for Evacuees	95695	firstinrelief.com							X			
Gender Health Center	95817	thegenderhealthcenter.org	X	X		X			X			
Girl Scouts Heart of	95695	girlscoutshcc.org			X				X			

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavioral/ substance abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence-free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs such as housing, jobs, and food	8. Access and functional needs	9. Access to specialty and extended care	10. Injury and disease prevention and management
Central California												
Golden Days Adult Day Health	95691	(916) 371-6011		X		X					X	
Goodwill – Sacramento Valley & Northern Nevada	95776	goodwillsacto.org							X			
Habitat for Humanity Yolo County	95695	HabitatYolo.org							X			
Head Start – Yolo County Office of Education	95605, 95616, 95627, 95695	https://www.ycoe.org	X		X	X			X			
Health Education Council	95691	healthedcouncil.org			X	X						
Holy Cross Parish	95605	scd.org							X			
Knights Landing Family	95645	empowerYolo.org/family-		X		X			X			X

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavioral/ substance abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence-free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs such as housing, jobs, and food	8. Access and functional needs	9. Access to specialty and extended care	10. Injury and disease prevention and management
Resource Center		resource-centers/										
Knights Landing One Health Center	95645	knightslandingclinic.org		X								
Legal Services of Northern California – Health Rights	95814	lsnc.net							X			
Lilliput Children's Services	95695	lilliput.org							X			
Madison Migrant Center (Child Development Centers)	95834	cdicdc.org			X	X						
Meals on Wheels Yolo County	95776	mowYolo.com							X			
Mercy Housing	95838	mercyhousing.org							X			
My Sister's House	95818	my-sisters-house.org	X	X		X			X			

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavioral/ substance abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence-free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs such as housing, jobs, and food	8. Access and functional needs	9. Access to specialty and extended care	10. Injury and disease prevention and management
NAMI Yolo	95695	namiYolo.org	X									
Northern California Children's Therapy Center	95695	ctchelpkids.org		X							X	
Outa Sight Group	95695	outasightgroup.com			X				X			
Pregnancy Support Group	95695	pregnancysupportgroup.org	X						X			
PRIDE Industries	95747	prideindustries.com							X			
Progress House	95695	progresshouseinc.org	X						X			
Resilient Yolo (Aces Connection)	95776	acesconnection.com/g/Yolo-county-ca-aces	X						X			
RISE Inc.	95695	rise.org	X	X	X	X			X			
Sacramento LGBT Community Center	95811	saccenter.org	X	X		X			X			

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavioral/ substance abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence-free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs such as housing, jobs, and food	8. Access and functional needs	9. Access to specialty and extended care	10. Injury and disease prevention and management
Safety Center Inc.	95695	safetycenter.org				X						X
Saint John's Retirement Village	95695	sjrv.org	X	X	X	X			X		X	
Saint Luke's Episcopal Church	95695	stlukeswoodland.org							X			
Saint Vincent de Paul Sacramento Council	95816	svdp-sacramento.org							X			
Salvation Army	95695	salvationarmyusa.org							X			
Senior Link of Yolo County	95695	lsnc.net/seniorlink	X	X	X				X		X	
Shingle Springs Tribal TANF Program	95825	shinglespringsrancheria.com/tanf/							X			
Shores of Hope	95605	shoresofhope.org	X		X	X			X	X		
Short Term Emergency Aide	95616	steac.org							X			

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavioral/ substance abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence-free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs such as housing, jobs, and food	8. Access and functional needs	9. Access to specialty and extended care	10. Injury and disease prevention and management
Committee (STEAC)												
Shriner's Hospital for Children – Northern California	95817	shrinershospitalforchildren.org/sacramento		X							X	
Slavic Assistance Center	95825	slaviccenter.us							X			
Soroptimist International of Woodland	95776	soroptimistofwoodland.org							X			
Stanford Youth Solutions	95826	youthsolutions.org	X			X			X			
STAY Well Center	95776	wcc.yccd.edu/student/wellness-center/	X	X								
Suicide Prevention and Crisis Services of Yolo County	95617	suicidepreventionYolocounty.org	X			X						
Summer House Inc.	95616	summerhouseinc.org	X	X	X	X	X		X	X		

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavioral/ substance abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence-free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs such as housing, jobs, and food	8. Access and functional needs	9. Access to specialty and extended care	10. Injury and disease prevention and management
Sutter Davis Hospital	95616	sutterhealth.org/davis	X	X	X							X
The Californian	95695	thecalifornian.net	X	X	X	X			X		X	
The Keaton's Childhood Cancer Alliance	95661	childcancer.org										X
The Mental Health America of California	95814	mhac.org	X									
Tuleyome	95695	tuleyome.org			X			X				
Turning Point Community Programs	95670	tpcp.org	X						X			
United Cerebral Palsy (UCP) of Sacramento & Northern Calif.	95841	ucpsacto.org			X	X			X	X	X	
University of California, Davis	95616	ucdavis.edu							X			

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavioral/ substance abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence-free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs such as housing, jobs, and food	8. Access and functional needs	9. Access to specialty and extended care	10. Injury and disease prevention and management
VA Northern California Healthcare System	95655	northerncalifornia.va.gov	X	X					X			
Volunteers of America – Northern California & Northern Nevada	95821	voa-ncnn.org	X						X			
Walter's House – Fourth and Hope	95695	fourthandhope.org	X						X			
WarmLine Family Resource Center	95818	warmlinefrc.org	X	X					X			
West Beamer Place Housing	95695	(530) 419-5976							X			
West Sacramento Community Center	95691	cityofwestsacramento.org/residents			X							

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavio ral/ substan ce abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence -free environ ment	5. Access to dental care and preventi ve services	6. Pollutio n-free living environ ment	7. Access to basic needs such as housing , jobs, and food	8. Access and function al needs	9. Access to specialt y and extende d care	10. Injury and disease preventi on and manage ment
Wind Youth Services	95817	windyouth.or g	X			X			X			
Winter's Healthcare Foundation	95694	wintershealth .org	X	X	X		X					X
Woodland Community Care Car	95776	communityca recar.org								X		
Woodland Community College Foundation	95776	wcc.yccd.edu/ foundation/							X			
Woodland Community Senior Center	95776	cityofwoodlan d.org		X	X				X		X	
Woodland Ecumenical and Multi-Faith Ministries	95695	woodlandmul tifaith.com							X			
Woodland Memorial Hospital	95695	dignityhealth. org	X	X								X

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavioral/ substance abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence-free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs such as housing, jobs, and food	8. Access and functional needs	9. Access to specialty and extended care	10. Injury and disease prevention and management
Woodland School District	95695	wjusd.org							X			
Woodland United Way	95695	woodlandunitedway.org	X	X					X			
Woodland Youth Services	95695	woodlandyouthservices.org	X						X			
YMCA of Superior California	95695	ymcasuperiorcal.org			X	X						
Yolo Adult Day Health Center – Woodland Healthcare	95695	dignityhealth.org/sacramento/services/Yolo-adult-day-health-services	X	X	X	X			X		X	X
Yolo Bus	95776	Yolobus.com								X		
Yolo Center for Families	95695	Yolofamilies.org		X		X			X			
Yolo Community Care Continuum	95695	y3c.org	X			X			X			

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavioral/ substance abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence-free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs such as housing, jobs, and food	8. Access and functional needs	9. Access to specialty and extended care	10. Injury and disease prevention and management
Yolo County CASA	95695	Yolocasa.org	X			X						
Yolo County Children's Alliance	95616	Yolokids.org		X		X			X			
Yolo County Health and Human Services Agency	95695	Yolocounty.org/health-human-services	X	X	X	X		X	X			X
Yolo County Housing	95695	ych.ca.gov							X			
Yolo County WIC	95695	Yolocounty.org/health-human-services		X	X							X
Yolo Crisis Nursery	95618	Yolocrisisnursery.org	X			X			X			
Yolo Employment Services	95695	Yoloes.org							X			
Yolo Food Bank	95776	Yolofoodbank.org			X				X			

Organization Information			Significant Health Need Met (X)									
Name	ZIP Code	Website	1. Access to mental/ behavioral/ substance abuse services	2. Access to quality primary care health services	3. Active living and healthy eating	4. Safe and violence-free environment	5. Access to dental care and preventive services	6. Pollution-free living environment	7. Access to basic needs such as housing, jobs, and food	8. Access and functional needs	9. Access to specialty and extended care	10. Injury and disease prevention and management
Yolo Healthy Aging Alliance	95616	Yolohealthyaging.org	X	X	X				X		X	X
Yolo Hospice	95618	Yolohospice.org		X		X			X		X	

Limits and Information Gaps

Study limitations included challenges in obtaining secondary quantitative data and assuring community representation via primary data collection. For example, most of the data used in this assessment were not available by race or ethnicity. The timeliness of the data also presented a challenge, as some of the data were collected in different years; however, this is clearly noted in the report to allow for proper comparison.

As always with primary data collection, gaining access to participants that best represented the populations needed for this assessment was a challenge. This was increasing difficult in the rural areas of the county identified as Communities of Concern. In addition, though efforts were made to insure adequate sample size of the countywide survey, the survey was administered via convenience sample by the multiple partners of the project. Convenience sampling limits generalizability of the survey findings. As the survey questions were not specifically written to the various potential health need categories, the survey data were limited in its scope to speak directly to the identification of various health needs. However, any health need, where specific survey data were assigned, that performed poorly against benchmark comparisons was included as a significant health need in the CHNA/CHA finding. In addition, all primary data are self-reported data, which has inherent limitations in accuracy.

An effort was made to verify all resources (assets) collected in the 2016 hospital partner CHNAs via web search, to add any additional resources identified during primary data collection, and to add any other resources identified as part of the partnership work in Yolo County. Ultimately some resources may not be listed that exist in the county to address the SHNs.

CHNA/CHA Data Collection Instruments

Key Informant Interview Guide

The following questions served at the interview guides for both key informant and focus group interviews:

1) **BACKGROUND**
   a) Tell me about your current role and the organization you work for?
   b) How would you define the community(ies) you serve or live in?
      i) Consider:
         (1) Specific geographic areas?
         (2) Specific populations served?
            (a) Who? Where? Racial/ethnic make-up, physical environment (urban/ rural, large/small

2) **HEALTH ISSUES**
   a) What are the biggest health needs in the community?
      i) *INSERT MAP exercise: Please use this map to help our team understand where communities that experience health burdens live?*
         (1) Consider:
            (a) What specific geographic locations struggle with health issues the most?
            (b) What specific groups of community members experience health issues the most?
   b) What historical/societal influences have occurred since the last assessment (2015-16) that should be taken into consideration around health needs?

3) **CHALLENGES/BARRIERS**
   a) What are the challenges (barriers) to being healthy for the community?
      i) Consider:
         (1) Health Behaviors
         (2) Social factors
         (3) Economic factors
         (4) Clinical Care factors
         (5) Physical (Built) environment

4) **SOLUTIONS**
   a) What solutions will address the health needs and or challenges mentioned?
      i) Consider:
         (1) Health Behaviors, Social factors, Economic factors, Clinical Care factors, Physical (Built) environment

5) **PRIORITY: Based on what we have discussed so far, what are currently the most important or urgent top 3 health issues or challenges to address in order to improve the health of the community?**

6) **RESOURCES**
   a) What resources exist in the community to help people live healthy lives?
      i) Consider:

(1) Barriers to accessing these resources.
(2) New resources that have been created since 2016
(3) New partnerships/projects/funding
7) **What other people, groups or organizations would you recommend we speak to about the health of the community?**
    i) Name 3 types of service providers that you would suggest we include in this work?
    ii) Name 3 types of community members that you would recommend we speak to in this work?
8) **OPEN: Is there anything else you would like to share with our team about the health of the community?**

Focus Group Interview Guide

1. **BACKGROUND**
   a. Where in the county (HSA) do you live?
      i. Specific town? General area?
   b. How would you describe the community (ies) you live in using a few words?
      i. Probe for:
         1. Specific geographic areas?
         2. Specific populations served?
            1. *Who? Where? Racial/ethnic make-up, physical environment (urban/ rural, large/small*

2. **HEALTH ISSUES**
   a. What are the biggest health needs in the community that you live?
      i. *INSERT MAP exercise: Please use this map to help our team understand where communities that experience health burdens live?*
         1. Probe for:
            1. What specific geographic locations struggle with health issues the most?
            2. What specific groups of community members experience health issues the most?

3. **CHALLENGES/BARRIERS**
   a. What are the challenges (barriers) to being healthy for the community you live in?
      i. Probe for:
         1. Health Behaviors
         2. Social factors
         3. Economic factors
         4. Clinical Care factors
         5. Physical (Built) environment

4. **SOLUTIONS**
   a. What solutions do you think are needed to address the health needs and or challenges mentioned previously?

            i. Probe for:
1. Health Behaviors
2. Social factors
3. Economic factors
4. Clinical Care factors
5. Physical (Built) environment

5. **PRIORITY: Based on what we have discussed so far, what are currently the most important or urgent top 3 health issues or challenges to address in order to improve the health of the community you live in?**
6. **RESOURCES**
   a. What resources exist in your community to help people live healthy lives?
          i. Probe for:
      1. Barriers to accessing these resources.
      2. New resources that have been created since 2016
      3. New partnerships/projects/funding

7. **OPEN: Is there anything else you would like to share with our team about the health of the community?**

Countywide Survey Instrument
Yolo County Health Status Survey

The purpose of this survey is to better understand your opinions about your health and the health of the Yolo County community. The results will help Yolo County Department of Public Health, area hospitals (Woodland Memorial Hospital) and local community clinics support important community health initiatives and projects to improve the health of Yolo County residents.

In order to participate in taking the survey we ask that you meet the following:
- You live in Yolo County
- You understand that taking this survey is voluntary
- You agree to only take the survey once

We deeply appreciate your time as we know it is valuable. The survey should only take about 10 minutes.

Background Information

1. What city in Yolo County do you live in?
❑ Clarksburg
❑ Esparto
❑ Madison
❑ Woodland
❑ Davis
❑ Guinda
❑ West Sacramento
❑ Yolo
❑ Dunnigan
❑ Knights Landing
❑ Winters
❑ Other _____

2. How long have you lived in Yolo County?
❑ Less than 1 year
❑ 1 - 5 years
❑ 5 – 10 years
❑ 10 – 20 years
❑ Over 20 years
❑ I have lived here all my life

3. What is your age?
- ❑ Under 18
- ❑ 18-24
- ❑ 25-34
- ❑ 35-44
- ❑ 45-54
- ❑ 55-64
- ❑ 65- 74
- ❑ 75-84
- ❑ 85 or older
- ❑ Decline to answer

4. Are you Hispanic or Latino?
- ❑ Yes (Hispanic, Latino)
- ❑ No
- ❑ Decline to answer

5. What race do you most identify with?
- ❑ Asian
- ❑ Black/African American
- ❑ White/Caucasian
- ❑ Native American/Indigenous Persons
- ❑ Native Hawaiian or other Pacific Islander
- ❑ Other _____

6. What is your current gender identity?
- ❑ Female
- ❑ Male
- ❑ Genderqueer
- ❑ Transgender Male/Transman/FTM
- ❑ Transgender Female/Transwoman/MTF
- ❑ Decline to Answer
- ❑ Additional Category (please describe) _____

7. Which describes your current employment status?

- ❑ Full-time
- ❑ Part-time
- ❑ Retired
- ❑ Unemployed
- ❑ Disabled
- ❑ Student

❑ Decline to answer

8. What is or was your main occupation?
   ❑ City, county, or state government
   ❑ Construction
   ❑ Education
   ❑ Farming/agriculture
   ❑ Health care
   ❑ Manufacturing/factory
   ❑ Power or utility company
   ❑ Restaurant/fast food
   ❑ Retail store
   ❑ Technical/Professional
   ❑ Transport or trucking
   ❑ Work from home
   ❑ Student
   ❑ Other: _____

9. If you are you a student, which describes your current enrollment?

   ❑ Full time
   ❑ Part time

   9a. Which college/university/school/program are you enrolled in?
   _____

10. What language(s) do you primarily speak at home?
    ❑ English
    ❑ Spanish
    ❑ Russian
    ❑ Other: _____
    ❑ Decline to answer

11. How many people live in your home, including yourself? _____ ❑ Decline to answer

12. What is your annual household income?
    ❑ Less than $10,000
    ❑ $10,000 to $19,999
    ❑ $20,000 to $29,999
    ❑ $30,000 to $39,999
    ❑ $40,000 to $49,999
    ❑ $50,000 to $59,999
    ❑ $60,000 to $69,999
    ❑ $70,000 to $79,999
    ❑ $80,000 to $89,999

- ❏ $90,000 to $99,000
- ❏ $100,000 to $149,999
- ❏ $150,000 to $249,999
- ❏ 250,000 or greater
- ❏ Decline to answer

Your Personal Health

13. In general, you would describe your current overall health status as:

- ❏ Excellent
- ❏ Very Good
- ❏ Good
- ❏ Fair
- ❏ Poor

14. Do you have a condition that limits one or more physical activities?
- ❏ Yes   If YES, answer question 14a.
- ❏ No   If No, please skip to question 15.

14a. If yes, which activities are affected? Check all that apply.
- ❏ Walking, climbing stairs, reaching, lifting, or carrying
- ❏ Dressing, bathing, or getting around inside your home
- ❏ Going outside the home alone to shop or visit the doctor
- ❏ Difficulty working at a job or business
- ❏ Other: _____

15. Have you ever been told by a doctor that you have: Check all that apply.
- ❏ Asthma/lung disease/COPD/emphysema
- ❏ Autoimmune disease (like Lupus, Type 1 Diabetes)
- ❏ Cancer
- ❏ Diabetes (Type 2 Diabetes, Gestational Diabetes)
- ❏ Heart disease
- ❏ Hypertension (high blood pressure)
- ❏ Mental illness
- ❏ Drug or alcohol problem
- ❏ Physical disability
- ❏ Obesity/overweight
- ❏ Other: _____

16. Was there ever a time during the past 12 months when you felt that you might need to see a professional because of problems with your mental health, emotions, nerves, or use of alcohol or drugs?

❏ Yes (If YES, go to question 16a)   ❏ No   (If NO, go to question 16b)

16a. If Yes, have you seen a doctor or mental health professional (counselor, psychiatrist, or social worker) for problems with your mental health, emotions, nerves, or your use of alcohol or drugs?
❑ Yes   ❑ No

16b. If NO, you did not seek medical care, why not? Check all that apply.
❑ I was concerned about the cost of treatment.
❑ I did not feel comfortable talking with a professional about my personal problems.
❑ I was concerned about what would happen if someone found out I had a problem.
❑ My insurance does not cover treatment for mental health problems.
❑ I was not able to get an appointment.
❑ I did not know where to go for help.
❑ Other: _____

17. Do you have health insurance?
❑ Yes (If YES, go to question 17a)
❑ No (if NO, go to questions 17b)

17a. If Yes, you do have health insurance, what type:
❑ Private – employer or someone else's employer
❑ Private – Covered California
❑ Private – individual plan
❑ Medi-Cal
❑ Medicare
❑ Military or VA
❑ Other government
❑ Don't know
❑ Other: _____

17b. If No, you DO NOT have health insurance:
Do you plan to get health insurance through Covered California?
❑ Yes
❑ No
❑ Not Sure

17c. Are you eligible for Medi-Cal or Medicare?
❑ Yes
❑ No
❑ Don't know

18. Did you see a doctor in the past 12 months?

❑ Yes (If YES, go to 18a)
❑ No

18a. If YES, I have seen a doctor in the past 12 months:
How many times did you see your doctor in the past 12 months?
❑ Once
❑ 2 - 5 times
❑ 6 or more

❑ Don't know

18b. Would you have liked to (or felt you needed to) see a doctor more often than this?
❑ Yes ❑ No

19.   How far do you travel to your regular doctor?
❑ 0-5 miles   ❑ 6-10 miles ❑11-15 miles ❑16-20 miles ❑ More than 20 miles

20.   How long does it normally take you to get to your regular doctor's office from your home?
❑ Less than 5 minutes ❑ 5-10 minutes ❑10-20 minutes ❑ 20-30 minutes
❑ 30-45 minutes ❑ 45-60 minutes ❑ More than an hour

21.   When you last called the medical clinic for an appointment, how quickly could you be seen by a doctor?
            ___ days OR ___ weeks OR ❑ Don't know
    21a. Were you satisfied with how quickly you were able to get an appointment?
        ❑ Very Satisfied
        ❑Satisfied
        ❑ Neutral
        ❑ Unsatisfied
        ❑ Very Unsatisfied
22.   How important is it to you to have regular health care services and medical screenings?
        ❑ Extremely Important
        ❑ Very Important
        ❑ Neutral
        ❑ Somewhat Important
        ❑   Not Important

23.   Have you received health care services or medical screenings in the past 12 months?
        ❑ Yes   ❑ No (If NO, go to 24a)

    23a. If no, please check all that apply.
    ❑ I have to wait too long to see a doctor
    ❑ I was/am too busy
    ❑ The doctor does not speak the same language as I do
    ❑ I did not have transportation to the medical clinic
    ❑ The medical clinic is not open all of the time, so it is difficult to get an appointment
    ❑ There are not enough doctors in my area, so it is difficult to get an appointment
    ❑ I did/do not have any health insurance
    ❑ I did/do have health insurance, but it does not cover all of my costs
    ❑ I did not need health care services or medical screenings because I was not sick
    ❑ I do not trust the health care providers
    ❑ Not sure / Don't know
    ❑ Other: _____

24.   Did you visit the emergency room in the past 12 months?
        ❑ Yes (If YES, go to question 25a)

❑ No (In NO, go to question 26)

24a. If Yes, on your last visit, did you go there because you: Check all that apply.
❑ Had a life-threatening illness or injury
❑ Could not get an urgent care appointment with my doctor
❑ Became ill or injured before 8am or after 5pm on a weekday
❑ Became ill or injured during the weekend
❑ Needed to refill a prescription
❑ Thought it seemed more convenient than waiting for an appointment
❑ Do not have a regular doctor, this is my usual source of care

25. Do you have dental insurance?
❑ Yes   ❑ No   ❑ Unsure

26. Have you been to the dentist in the past 12 months?
❑ Yes   ❑ No

27. Did you become sick or injured on the job in the past 12 months?
❑ Yes   ❑ No   ❑ Not applicable (not working)

27a. If Yes, did you seek medical care for your job-related illness or injury?
❑ Yes
❑ No

27b. If No, why not? _____

Health Status of the Yolo County Community

28. What do you think are the three biggest health issues that most affect our community? Choose three (3):
❑ Health problems associated with aging
❑ Cancer
❑ Dental problems
❑ Heart disease
❑ Infectious diseases (e.g., hepatitis, tuberculosis, etc.)
❑ Mental health issues
❑ Child abuse and neglect
❑ Motor vehicle/Bicycle accidents
❑ Poor birth outcomes
❑ Respiratory illnesses/lung disease/asthma
❑ Sexually transmitted diseases
❑ Homicide
❑ Stroke
❑ Teenage pregnancy
❑ Sexual abuse
❑ Alcoholism

❑ Diabetes
❑ Obesity
❑ □ Other_____
❑ □ Other_____

29. What do you think are the three individual behaviors that are most responsible for health issues in our community? Choose three (3):
   ❑ Alcohol abuse
   ❑ Driving while drunk/on drugs
   ❑ Drug abuse
   ❑ Lack of exercise
   ❑ Poor nutrition/eating habits
   ❑ Not getting "shots" (vaccines) to prevent disease
   ❑ Smoking/tobacco use
   ❑ Unsafe sex
   ❑ Using weapons/guns
   ❑ Not getting regular check-ups by a health care provider
   ❑ Distracted driving
   ❑ Crime/violence
   ❑ Suicide
   ❑ Life stress/lack of coping skills
   ❑ Teenage sex
   ❑ Domestic or intimate partner violence
   ❑ Other_____
   ❑ Other_____

30. What do you think are the three social and economic circumstances that are most responsible for health issues in our community? Choose three (3):
   ❑ Unemployment
   ❑ Poverty
   ❑ Homelessness
   ❑ Lack of education/no high school education
   ❑ Cultural barriers
   ❑ Racism and discrimination
   ❑ No health insurance
   ❑ Language barriers
   ❑ Not enough food (food insecurity)
   ❑ Single parenting
   ❑ Other_____
   ❑ Other_____

31. What do you think are the three environmental issues that are most responsible for health issues in our community? Choose three (3):

- ❑ Air pollution
- ❑ Pesticide use
- ❑ Poor housing conditions
- ❑ Poor neighborhood design
- ❑ Heat/hot days
- ❑ Lack of safe walkways and bikeways
- ❑ Cigarette smoke
- ❑ Trash on streets & sidewalks
- ❑ Flooding/drainage problems
- ❑ Contaminated drinking water
- ❑ Lack of access to healthy foods
- ❑ Lack of access to places for physical activity
- ❑ Lack of public transportation
- ❑ Traffic
- ❑ Other_____
- ❑ Other_____

32. What do you think are the three most important factors of a "healthy community"? Choose three (3):

- ❑ Safe place to raise kids
- ❑ Green/open spaces
- ❑ Job opportunities
- ❑ Good schools
- ❑ Access to health care
- ❑ Access to healthy food
- ❑ Low crime/safe neighborhoods
- ❑ Parks and recreation facilities
- ❑ Affordable housing
- ❑ Support agencies (faith-based organizations, support groups, social worker outreach)
- ❑ Tolerance for diversity
- ❑ Air quality
- ❑ Elderly care
- ❑ Well-informed community about health issues
- ❑ Community involvement
- ❑ Time for family
- ❑ Access to childcare
- ❑ Other _____
- ❑ Other _____

33. Is there anything else you would like us to know about your personal health or the health status of the Yolo County Community?

Appendix B
2018 COMMUNITY
HEALTH STATUS SURVEY
RESULTS

Yolo County Health & Human Services Agency
Community Health Branch
June, 2019

Authors and Acknowledgments

Table of Contents

Section I Executive Summary

Quantitative Data

About 1 in 6 survey respondents of Yolo County lived in households with annual incomes <$10,000 and 1 in 5 resided in households with incomes from $10,000 to $29,999.

One-third of respondents had lived in the county for over 20 years and nearly two-thirds (64%) for more than 10 years.

More respondents in 2018 lived in larger households (30% with 5 or more persons) compared to 2014, and fewer respondents lived in 2-person households (17% in 2018).

A slightly higher percentage of 2018 respondents reported good, very good or excellent health (82%), compared to 79% in 2014.

The most commonly reported chronic condition was obesity (22% of respondents), being highest in the Central region (Woodland) at 27%. A higher proportion of respondents in 2018 (18%) reported suffering from chronic lung disease than in 2014 (13%).

Fewer 2018 respondents (66%) with a phyical disability reported difficulty walking, climbing stairs, reaching, lifting and carrying compared to 2014 (76%). Fewer respondents with physical disabilities in 2018 were able to work (28%) than in 2014 (50%). The percentage of 2018 respondents (29%) with 3 or 4 of the 4 listed physical limitations doubled compared to 2014's 15%.

About 1 in 4 (or 27%) of 2018 respondents reported wanting to see a mental health (MH) provider. There was little change in the percentage of respondents wanting to see one who actually did—at 68%. More "other" reasons were listed for not seeking MH care.

More 2018 respondents had dental in insurance in 2018 (67% or two-thirds) compared to 52% in 2014. Similar to the findings in 2014, those with no dental insurance were 3 times less likely to have visited a dentist in the past year.

Ninety percent (9 out of 10) respondents in 2018 had health insurance compared to 80% in 2014. Fewer were on Medi-Cal (36% in 2018) and more had private insurance through an employer (40%). The percentage of 2018 respondents without health insurance halved in all age groups.

Seventy-eight percent of 2018 respondents thought health screenings were important or very important and 82% saw a medical provider or received health screenings in the past year.

Slightly more 2018 respondents saw a doctor 2 to 5 times in the past year (53%) than in 2014 (47%), and 1 in 4 (26%) had 6 or more visits. One in 5 of those who saw a medical provider wanted to see a provider more often.

Half of 2018 respondents were able to obtain a medical appointment <3 days (same as 2014). A higher percentage obtained an appointment in 4 to 6 days (10% in 2018 vs. 7% in 2014) and fewer waited 14 to 20 days (11% in 2018 vs. 16% in 2014). More respondents reported being satisfied or very satisfied with the speed of getting an appointment as well (59% in 2018 vs. 48% in 2014). There was also a slight reduction in the percentage of respondents who used the Emergency Room in 2018 to 23%.

Qualitative Data

The health conditions of greatest community concern were MH issues (44%), obesity (31%), diabetes (31%), alcoholism (28%) and cancer (23%). Mental health was the top concern despite

the prevalence of obesity among respondents being 22% and MH issues 12%. Under the "other" write-in category, 5% of respondents identified drug/substance/opioid abuse as one of their top three community health issues.

Prioritization of alcoholism and MH as community health concerns also showed up as top concerns relating to individual behaviors affecting health, with 35% of respondents citing alcohol abuse and 34% drug abuse.

Under socio-economic factors affecting health, top concerns included homelessness (44%) and poverty (39%). Concern about housing also ranked high for two of the other qualitative questions: poor housing conditions (26%) under environmental issues, and affordable housing (42%) under factors of a healthy community.

In relationship to chronic conditions such as obesity, diabetes and heart disease; lack of access to healthy foods was cited by 27% of respondents under environmental issues; and under factors of a health community, half of respondents cited access to healthcare and 29% access to healthy food.

The two highest-ranked issues relating to the environment were cigarette smoke (31% of respondents) and heat/hot days (29% of respondents).

The ranking by respondents of community health issues highlights the interrelated factors that affect community health such as substance abuse, mental illness, homelessness, and lack of affordable and quality housing. In terms of chronic disease, interrelated factors included access to healthcare, access to healthy food, and cigarette smoke.

Section II Overview of Yolo County

Yolo County encompasses about 1,000 square miles and its eastern boundary is the Sacramento River. There are three major cities: Davis (population 68,704), Woodland (population 60,426), and West Sacramento (population 54,163). Eighty-two percent of the land is devoted to agriculture. About 14% of the 225,000 residents live in rural areas. West Sacramento is the fastest-growing city in the county with a population increase of 71% between 2000 and 2017. The city of Davis is home to a University of California (UC) campus of some 40,000 students and UC-Davis is also a major employer. There are a number of other large employers in biotech, agriculture, manufacturing, warehouse distribution, retail, healthcare and recreation. Woodland and Davis have high walkability scores. The county has 66 miles of bike lanes, mostly in Davis and Woodland. The county has 442 acres designated as parks and 2,650 acres as open space.

The county has 77,948 housing units, of which 73,495 (94%) are occupied, with an average household size of 2.98. The median income is $65,729. About 1 in 4 residents were born abroad (n=50,932). Most households (93%) own a computer, and 89% have a broadband internet subscription.

There are over 8,100 civilian veterans (5% of the population over 18). Ten percent of the civilian population (n=22,666) is disabled. Among those with disabilities, over 9,000 (40%) are aged 65 or older.

The population is well-educated. Eighty-six percent of the population aged 25 and up graduated high school, 20% have a bachelor's degree, and 19% possess a graduate or professional degree. However, there are many residents (aged 5 and up) who speak a language other than English at home (n=78,256 or about 4 in 10 residents). Fourteen percent (about 1 in 7) of residents speak English less than "very well."

The county is divided into seven census subdivisions (Figure B1):

- The **Central** region includes the city of Woodland and the surrounding areas (population 61,000).
- The **East** Region includes the city of West Sacramento and the area running north along the Sacramento River (population 51,000).
- The **South** region includes the city of Davis, the community of El Macero and the surrounding areas (population 77,000).
- The **South West** region includes the city of Winters and the surrounding areas (population 8,600).
- The **South East** region includes Clarksburg and the area east of the Sacramento River (population 1,200).
- The **North East** region includes the communities of Dunnigan, Zamora, Yolo, and Knights Landing (population 4,300).
- The **North West** region stretches up the Capay Valley and includes the communities of Brooks, Capay, Esparto, Guinda, Madison, and Rumsey (population 5,700).
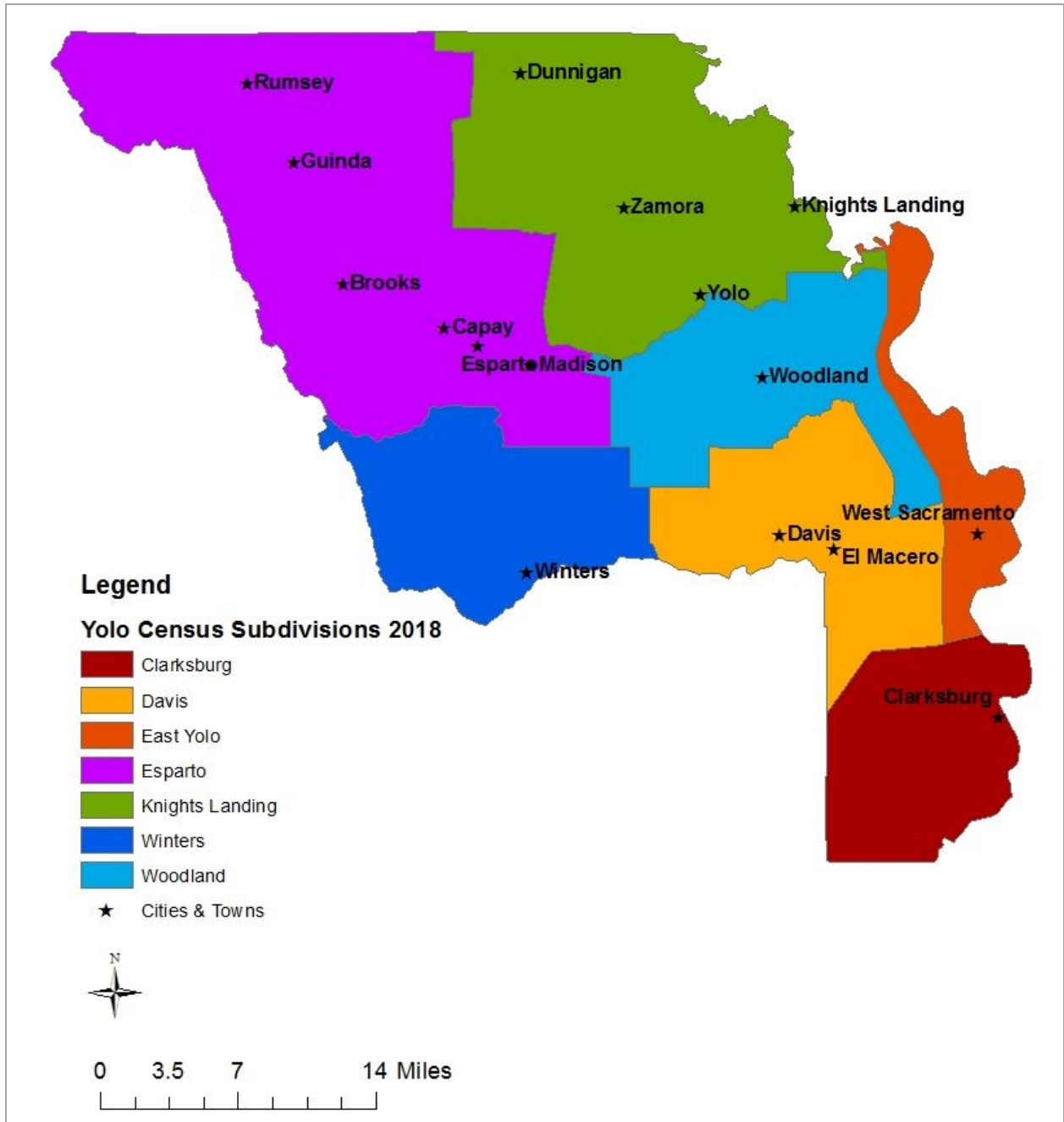
Figure B1: Yolo County census subdivisions and communities

The age structure of Yolo County's population is depicted in Figure B2. The largest segment by 5-year age group is the 20 to 24-year-olds (15%), representing mostly students at UC-Davis. Nearly one-third of today's population is aged 35 to 64 (32%). Like many counties in America, Yolo County's population is aging. In 2010 there were about 20,000 residents aged 65 and over (seniors), representing 10% of the county's population. According to the California Department of Finance (DOF), by 2018 this figure had risen to 28,000 seniors, nearly 1 in 8 (13%) of the county's population. By 2030, that number is expected to rise to nearly 43,000.
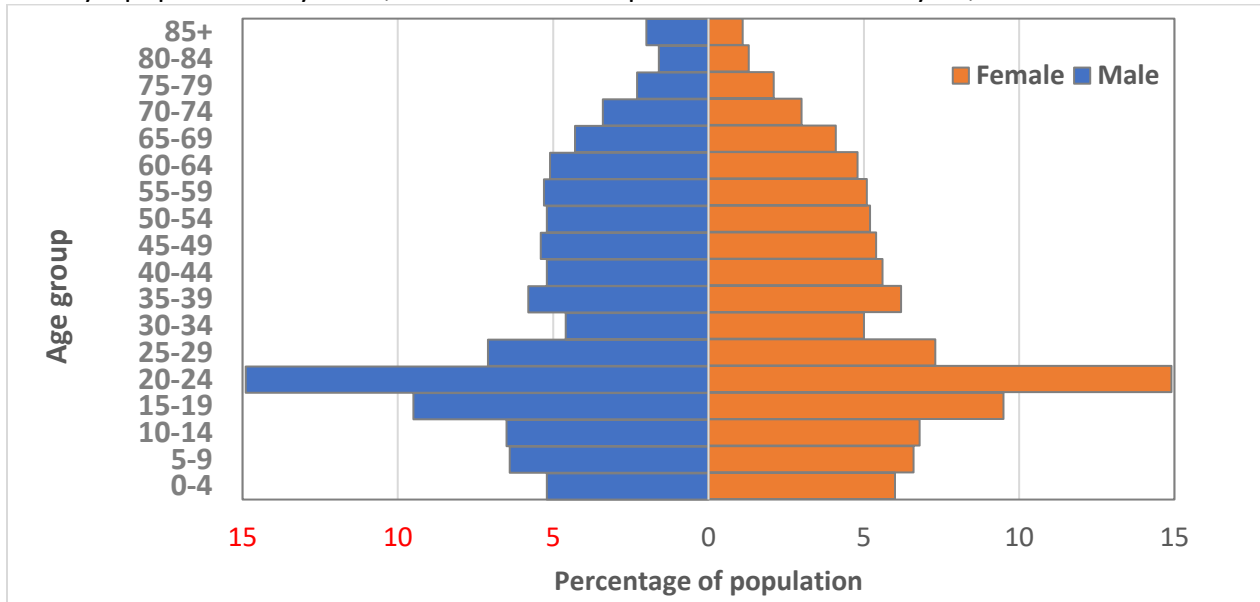
Figure B2: Age pyramid of the Yolo County population (DOF, 2018)

Yolo County's population is predominantly Non-Hispanic (NH)-White and Hispanic (any race) (Figure B3). The next-largest group is NH-Asians (13%). Other minorities include NH-multiracial persons (3%) and NH-Blacks (3%). Pacific Islanders and American Indians (and Alaska Natives) represent less than 1% of county residents.

Figure B3: Racial and ethnic breakground of Yolo County population (DOF, 2018)

Section III Survey Collection and Methodology

Yolo County partnered with the county's two community hospitals (Dignity Health Woodland Memorial Hospital and Sutter Davis Hospital) as they conducted their three-year Community Health Needs Assessment (CHNA), to meet IRS requirements 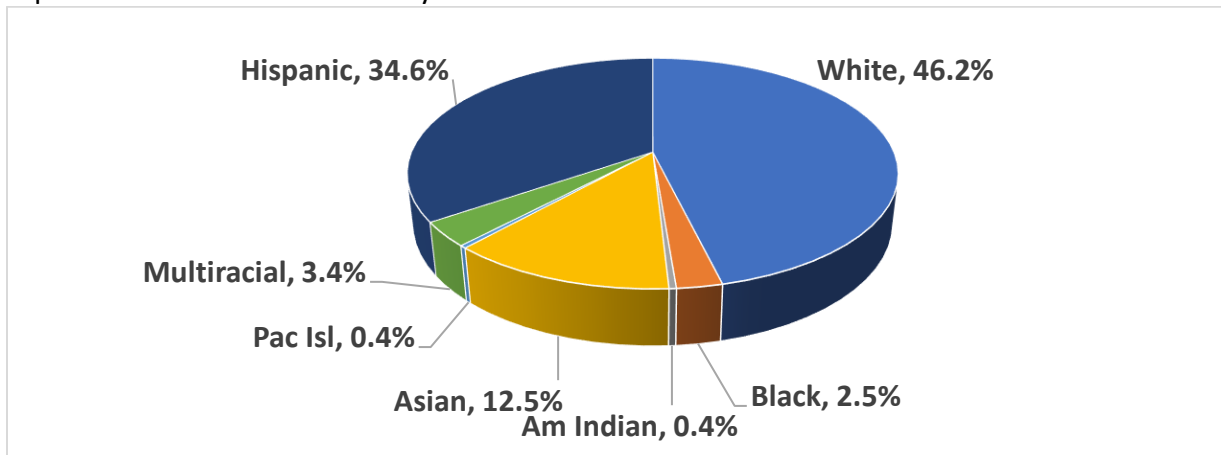for nonprofit status. The health department and hospitals both need to survey county residents about their health, access to care, and experience with the medical system, so we decided to combine our efforts and share survey data. Responses to some questions in the survey were also incorporated into the quantitative assessment of priority health needs in Yolo County.

A CHNA steering committee was formed to guide the CHNA process. Its members included staff from Yolo County's Health and Human Services Agency (HHSA); Dignity Health; Sutter Health; CommuniCare, who provide the bulk of healthcare for Medi-Cal and Medicare patients; Winters Healthcare, the primary healthcare provider in the rural South West of the county; and staff from Community Health Insights, the third-party contractor who conducted the quantitative analysis.

The CHNA steering committee reviewed the survey instruments used in Yolo County's previous community health assessment (CHA): the Community Themes and Strengths Assessment (2013) and the healthcare access survey (2014). Questions from the two surveys were combined into a single questionnaire. Many questions were worded exactly the same as in the previous questionnaires or contained only minor modifications, allowing comparison with prior results. The survey was made available in English (Appendix A), Spanish and Russian, the three threshold languages in the county. It could be accessed on the web via Survey Monkey as well as in paper format. About nine hundred surveys were completed online. The survey was also distributed in paper form at various outreach events from around June 1 until July 31 (Table B1). The hospitals provided eleven $30 gift cards as an incentive. Respondents had the option to provide their name, phone number and/or email on a tear-off slip if they wanted to be entered into the drawing for the gift card, and 1,400 respondents did so. In addition to the gift card incentive, small items, mostly provided by the two hospitals, were offered as giveaways to community members for completing the survey at the outreach events in Table B1. They consisted of shopping bags, pens, first-aid supplies, and hand sanitizer.

Paper copies of the survey were distributed at the following additional locations: Yolo County Service Centers, Yolo County Mental Health lobby Woodland, WIC (Woodland, West Sacramento, Winters), CommuniCare Davis Community Clinic and Salud Clinic (West Sacramento), Winters Healthcare front office, Dunnigan post office, county libraries (Davis, Esparto, Knights Landing, West Sacramento, Winters), City Hall West Sacramento, summer camp programs West Sacramento, Meals on Wheels (Davis, West Sacramento, Woodland), Knights Landing One Health, the Church of Jesus Christ of Latter-day Saints Davis, Sacramento Family Medical Clinic (West Sacramento), Gay Pride event, CommuniCare teen health education class, Davis Senior Center, Woodland Chiropractic, and a YMCA preschool.

Paper surveys were entered into Survey Monkey by three interns and downloaded in separate files for each language by the county epidemiologist. The output was combined into one Excel spreadsheet. Comments in Spanish and Russian were translated into English by county staff. Confidence intervals (when calculated) used the large-sample size formula for a binomial proportion or mean.

Table B1: Outreach events where the 2018 health status survey was distributed

Date	Event	Hours	City
6/26/2018	Woodland Memorial Hospital farmer's market	4:30-7pm	Woodland
6/28/2018	Sutter Davis Hospital farmer's market	10am-1pm	Davis
6/29/2018	Food Bank	6:45-8am	Woodland
6/29/2018	Food Bank	10:30am-noon	West Sacramento
6/30/2018	Woodland farmer's market	9am-12 noon	Woodland
7/3/2018	Woodland Memorial Hospital farmer's market	4:30-7pm	Woodland
7/6/2018	Food Bank	6:45-8am	Woodland
7/6/2018	Food Bank	10:30am-noon	West Sacramento
7/7/2018	Woodland farmer's market	9am-12 noon	Woodland
7/7/2018	Davis farmer's market	8am-1pm	Davis
7/11/2018	Davis farmer's market	4:30-8pm	Davis
7/12/2018	Sutter Davis Hospital farmer's market	10am-1pm	Davis
7/13/2018	Food Bank	6:45-8am	Woodland
7/13/2018	Food Bank	10:30am-noon	West Sacramento
7/14/2018	Davis farmer's market	8am-1pm	Davis
7/18/2018	Davis farmer's market	4:30-8pm	Davis

Section IV Demographics of Survey Respondents

Table B2 and Figure B4 show that survey respondents underrepresented residents from the city of Davis and overrepresented residents from the city of West Sacramento relative to the US Census American Community Survey (ACS).

Table B2: City of residence, survey respondents vs. US Census (Table S0101, ACS 2016 1-year estimate)

City	Population, US Census, 2016	Percent (ACS)	Count, Survey 2018	Percent (Survey)	95% LCL*	95% UCL†
Davis/El Macero	68,107	31.6%	516	22.5%	21.0%	24.0%
West Sacramento	51,386	23.8%	752	32.8%	30.9%	34.7%
Winters	6,974	3.2%	137	6.0%	5.5%	6.5%
Woodland	57,552	26.7%	566	24.7%	23.1%	26.3%
All Other Communities	31,783	14.7%	306	13.4%	12.4%	14.3%
Missing			14	0.6%	0.6%	0.7%
Total	215,802		2,291			

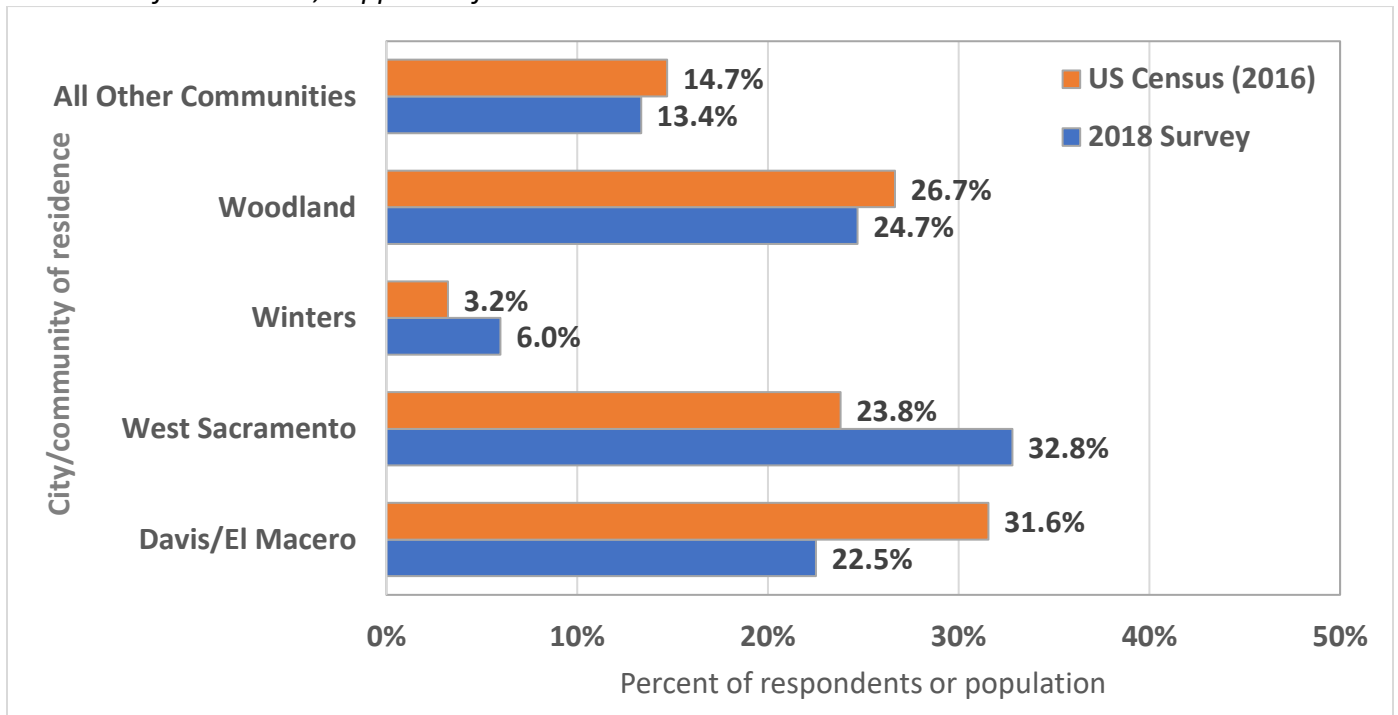*Lower confidence limit, †upper confidence limit*

Figure B4: Percentage of respondents by city of residence, 2018 survey vs. US Census (ACS 2016)

Table B3: Number of respondents by city, 2014 vs. 2018 survey

City	Count, 2014 Survey	Percent (2014)	Count, Survey 2018	Percent (2018)
Davis/El Macero	120	20.7%	516	22.5%
West Sacramento	87	15.0%	752	32.8%
Winters	46	7.9%	137	6.0%
Woodland	230	39.7%	566	24.7%
All Other Communities	95	16.4%	306	13.4%
Missing	1	0.2%	14	0.6%
Total	579		2,291	

There was a higher percentage of respondents from West Sacramento and a lower percentage from Woodland in 2018 than in 2014 (Table B3).

As occurred in previous county surveys, women were overrepresented compared to men among survey respondents (Table B4 and Figure B5) relative to the US Census.

Table B4: Sex of survey respondents vs. US Census (ACS Table S0101 1-year estimate)

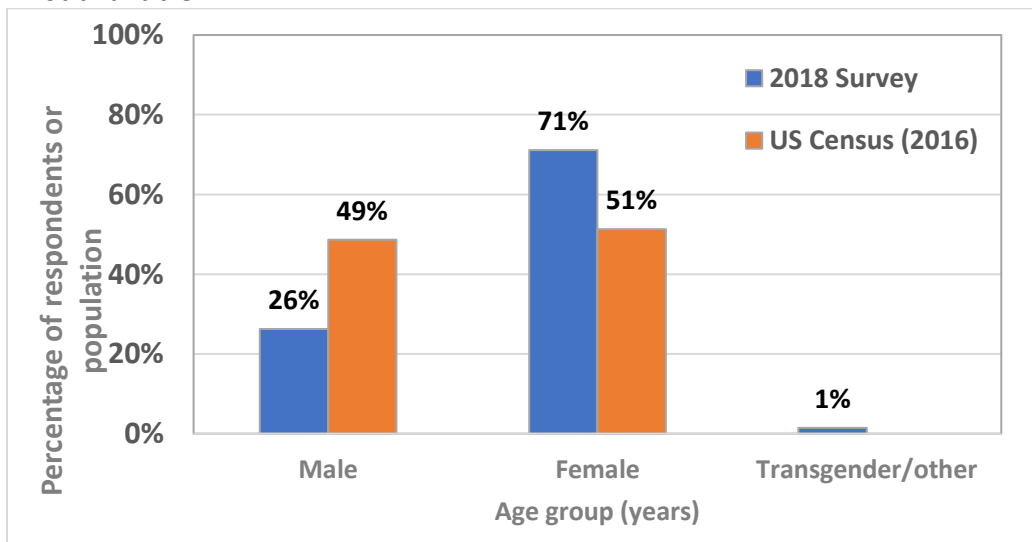|	US Census, 2016		Survey Respondents, 2018			
					95% Lower/Upper Confidence Limits	
Sex	Count	Percent	Count	Percent	LCL	UCL
Male	105,035	48.7%	602	26.3%	24.6%	27.9%
Female	110,767	51.3%	1,629	71.1%	69.3%	72.9%
Transgender/other	N/A*		34	1.5%	1.4%	1.6%
Not answered			26	1.1%		
Total	215,802		2,291			

*Not available

Figure B5: Percentage of respondents by sex, 2018 survey vs. US Census

Survey respondents in the under-18 group (age 15 to 17) were overrepresented and respondents in the 18 to 24-year-old age were underrepresented (Table B5 and Figure B6). The lower percentage for 18 to 24-year-olds likely reflects the timing of data collection from late

June to the end of July, when most UC-Davis students had left for the summer. Also of note, no data collection took place at the UC-Davis Student Health Center.

Table B5: Age of survey respondents vs. US Census (ACS Table S0101 1-year estimate)

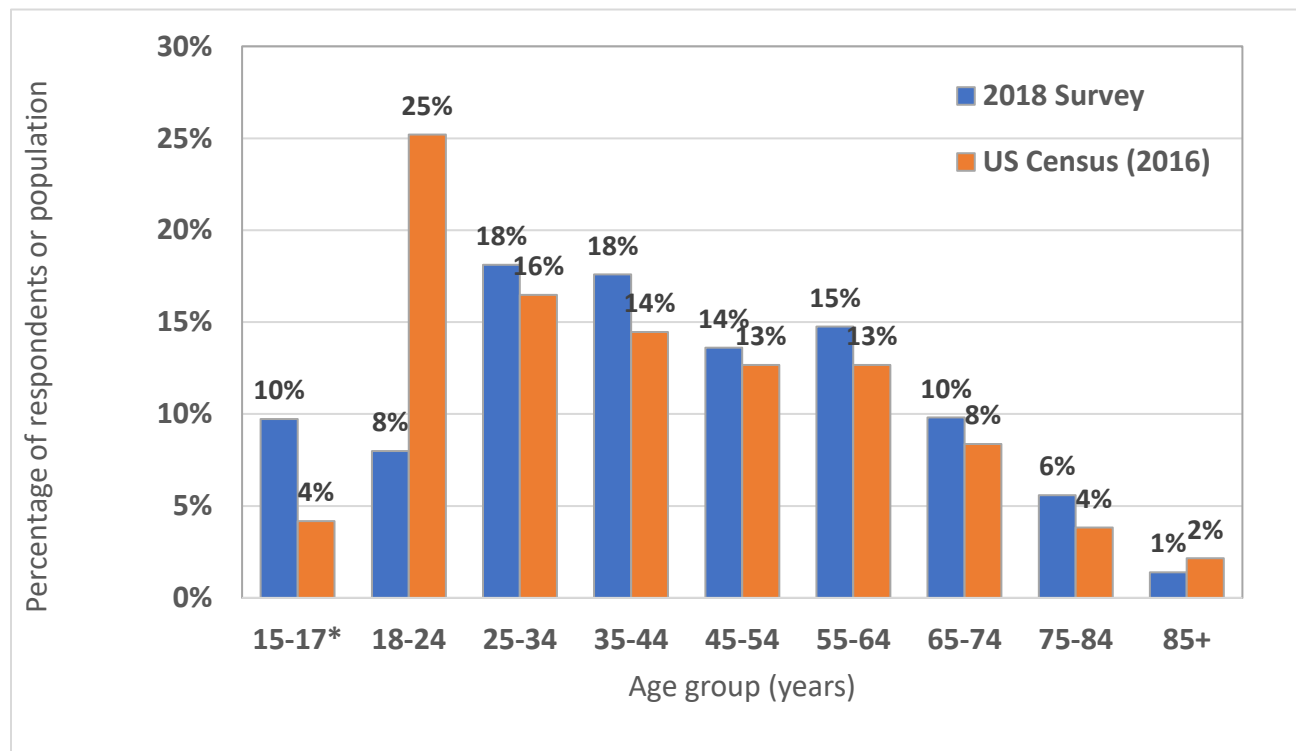| Age Group	US Census, 2016		Survey Respondents, 2018			
	Count	Population %	Count	%	95% LCL	95% UCL
15-17*	7,553	4.2%	223	9.7%	9.0%	10.5%
18-24	45,513	25.2%	183	8.0%	7.4%	8.6%
25-34	29,781	16.5%	415	18.1%	16.8%	19.4%
35-44	26,112	14.5%	403	17.6%	16.3%	18.8%
45-54	22,875	12.7%	312	13.6%	12.6%	14.6%
55-64	22,875	12.7%	338	14.8%	13.7%	15.8%
65-74	15,106	8.4%	225	9.8%	9.1%	10.6%
75-84	6,906	3.8%	128	5.6%	5.1%	6.0%
85+	3,884	2.2%	32	1.4%	1.3%	1.5%
Missing			32	1.4%	1.3%	1.5%
Total popn	180,605		2,291			

Figure B6: Percentage of respondents by age group, 2018 survey vs. US Census

Table B6: Number of respondents by age group, 2014 vs. 2018 survey

Age Group	2014 Survey	Percent (2014)	2018 Survey	Percent (2018)
15-19	17	2.9%	223	9.7%
20-24	58	9.8%	183	8.0%
25-34	154	26.6%	415	18.1%

35-44	94	16.2%	403	17.6%
45-54	70	12.1%	312	13.6%
55-64	57	9.8%	338	14.8%
65-74	31	5.4%	225	9.8%
75-84	16	2.8%	128	5.6%
85+	1	0.2%	32	1.4%
Missing	82	14.2%	32	1.4%
Total popn	579		2,291	

The biggest differences compared to the 2014 survey were higher percentages of respondents in the 15 to 19 year-old age group, and in age groups 65 and older (16.8% in 2018 vs. 8.3% in 2014). Also, fewer responses in 2018 were missing age (Table B6), due to placement of the demographic questions at the beginning of the questionnaire.

The race-ethnicity of respondents closely matched the US Census, except for underrepresentation of Asians/Pacific Islanders (Table B7 and Figure B7).

Table B7: Race-ethnicity of survey respondents vs. US Census (ACS Table B03002 1-year estimate)

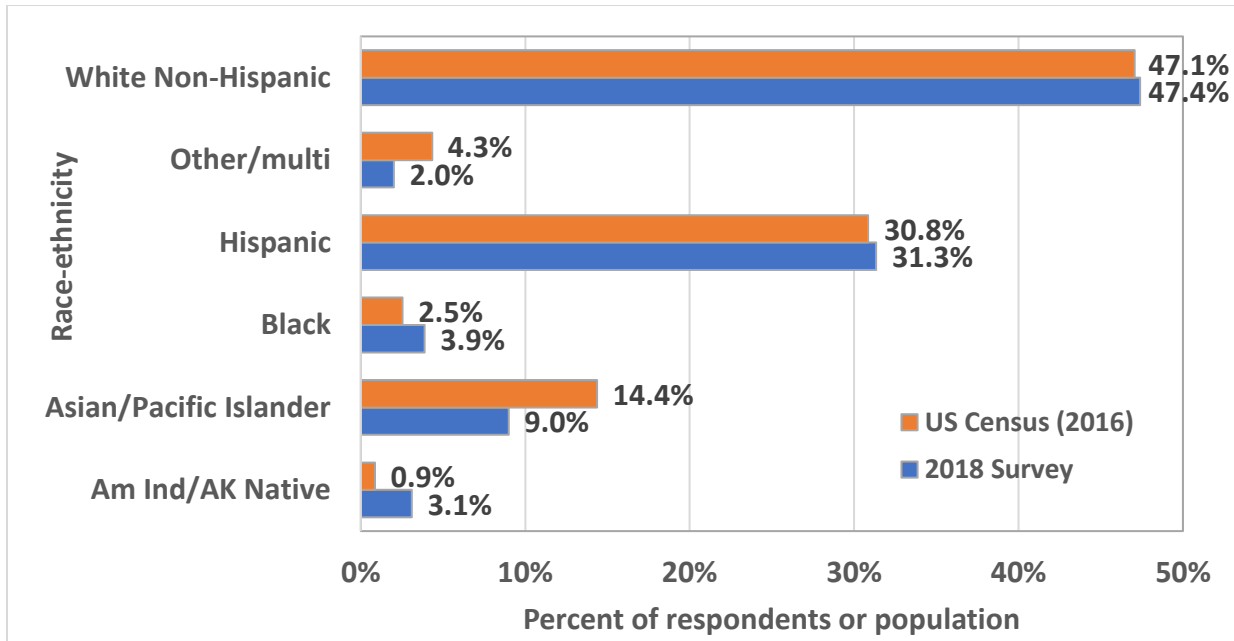| US Census, 2016			Survey Respondents, 2018			
Race-Ethnicity	Population	%	Count	%	95% LCL	95% UCL
Am Ind/AK Native*	1,835	0.9%	71	3.1%	2.8%	3.4%
Asian/Pacific Islander	30,991	14.4%	206	9.0%	8.3%	9.7%
Black	5,476	2.5%	89	3.9%	3.6%	4.2%
Hispanic	66,568	30.8%	718	31.3%	29.5%	33.2%
Other/multi	9,353	4.3%	46	2.0%	1.8%	2.2%
NH-White	101,579	47.1%	1,086	47.4%	45.3%	49.5%
Not answered			75	3.3%	3.0%	3.5%
Total	215,802		2,291			

*American Indian/Alaska Native

Figure B7: Percentage of respondents by race-ethnicity, 2018 survey vs. US Census

Table B8: Number of respondents by race-ethnicity, 2014 vs. 2018 survey

Race Ethnicity	2014 Survey	Percent (2014)	2018 Survey	Percent (2018)
Am Ind/AK Native*	8	1.4%	71	3.1%
Asian/Pacific Islander	32	5.5%	206	9.0%
Black	22	3.8%	89	3.9%
Hispanic	144	24.9%	718	31.3%
Other/multi	45	7.8%	46	2.0%
NH-White	200	34.5%	1,086	47.4%
Missing	128	22.1%	75	3.3%
Total popn	579		2,291	

*American Indian/Alaska Native

The main differences in race-ethnicity for the 2018 survey were higher percentages of respondents who were Asian/Pacific Islander, Hispanic and NH-White, and a lower percentage for other/multiracial persons (Table B8). The number of responses missing race-ethnicity was much lower in 2018 than 2014, which relates to the placement of the demographic questions at the beginning of the 2018 questionnaire rather than the end (as in 2014).

The three threshold languages in Yolo County are English, Spanish and Russian. (A sizeable Russian community exists in West Sacramento.) Over 90% of the surveys were received in English, although English was not always the language spoken at home (Tables B9 and B10, Figure B8). The percentage of people who speak a language other than English or Spanish is about two times higher in the US Census than among survey respondents.

Table B9: Language in which the survey was completed

Language	Count	Percent of Respondents
English	2,094	91.4%
Spanish	164	7.2%
Russian	33	1.4%
Total	2,291	

Table B10: Language spoken at home* of respondents vs US Census (ACS Table DP03, 1-year estimate)

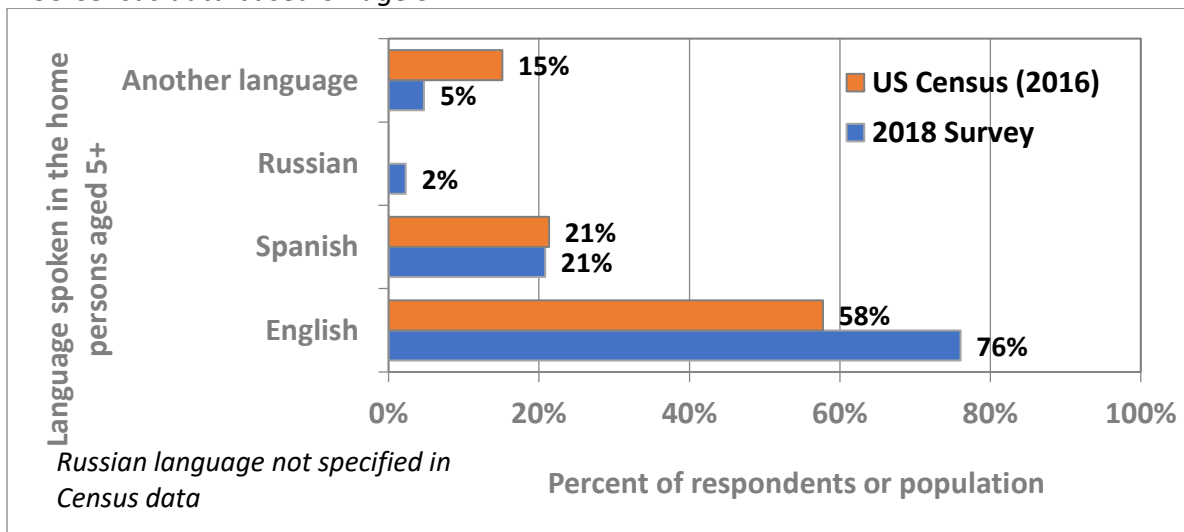| Language	Population 2016*	% of Population	Count 2018	% of Respondents
English	124,625	57.7%	1,742	76.0%
Spanish	46,045	21.3%	477	20.8%
Russian		Not avail.	52	2.3%
Another language	32,658	15.1%	108	4.7%
Not answered			160	7.0%
Total	215,802		2,291	

*US Census data based on age 5+

Figure B8: Percentage of respondents by language spoken at home, 2018 survey vs. US Census

Because of the income ranges specified, we could not compare the household income of respondents to the US Census. The median household income in Yolo County in 2017 was $65,729 (US Census ACS Table DP03). A broad range of incomes was represented in the survey. Fifteen percent of respondents had annual household incomes under $10,000 and another 21%

were in households with income between $10,000 and $29,999 (Table B11). Thus, 36% of respondents (over one-third) lived in households earning less than $30,000 per year.

Table B11: Household income of 2018 survey respondents

Income Range	Count	% of Respondents	95% LCL	95% UCL
Less than $10,000	343	15.0%	13.9%	16.1%
$10,000 to $19,999	267	11.7%	10.8%	12.5%
$20,000 to $29,999	203	8.9%	8.2%	9.6%
$30,000 to $39,999	151	6.6%	6.1%	7.1%
$40,000 to $49,999	90	3.9%	3.6%	4.3%
$50,000 to $59,999	82	3.6%	3.3%	3.9%
$60,000 to $69,999	68	3.0%	2.7%	3.2%
$70,000 to $79,999	74	3.2%	3.0%	3.5%
$80,000 to $89,999	63	2.7%	2.5%	3.0%
$90,000 to $99,999	78	3.4%	3.1%	3.7%
$100,000 to $149,999	198	8.6%	8.0%	9.3%
$150,000 to $249,999	135	5.9%	5.4%	6.4%
$250,000 or greater	38	1.7%	1.5%	1.8%
Decline to state/missing	501	21.9%	20.4%	23.3%
Total	**2,291**			

A high proportion of respondents (17%, n=385) did not answer or declined to answer the question about sexual identity. Based on those answering the question (n=1,906), nine out of 10 respondents were heterosexual (straight), 6% were bisexual and 4% gay/lesbian/queer (Table B12). Surveys were collected at one of LGBTQ (Lesbian, gay, bisexual, transgender and queer) event in an effort to obtain responses from this vulnerable population.

Table B12: Sexual orientation of 2018 survey respondents

Sexual Orientation	Count	% of Respondents Answering Question
Heterosexual	1,722	90.3%
Bisexual	104	5.5%
Gay	25	1.3%
Lesbian	27	1.4%
Other	4	0.2%
Queer	18	0.9%
Questioning/Unsure	6	0.3%
Total	**1,906**	

Most respondents had lived in the county for a long time, indicating that much of the county's population is stable and the county is a desirable place to live. One-third were residents for over 20 years, and nearly two-thirds (64%) had resided in the county for more than 10 years (Table B13).

Table B13: Length of residence in Yolo County

Length of Residence	Count	% of Respondents
Less than 1 year	127	5.5%

1-4 years	351	15.3%
5-9 years	324	14.1%
10-20 years	673	29.4%
More than 20 years	781	34.1%
Missing	35	1.5%
Total	**2,291**	

Table B14 and Figure B9 show that slightly more respondents in 2018 lived in larger households (30% were in households with 5 or more persons). Fewer respondents lived in 2-person households (17% in 2018 vs. 26% in 2014).

Table B14: Household size, 2014 vs. 2018 survey

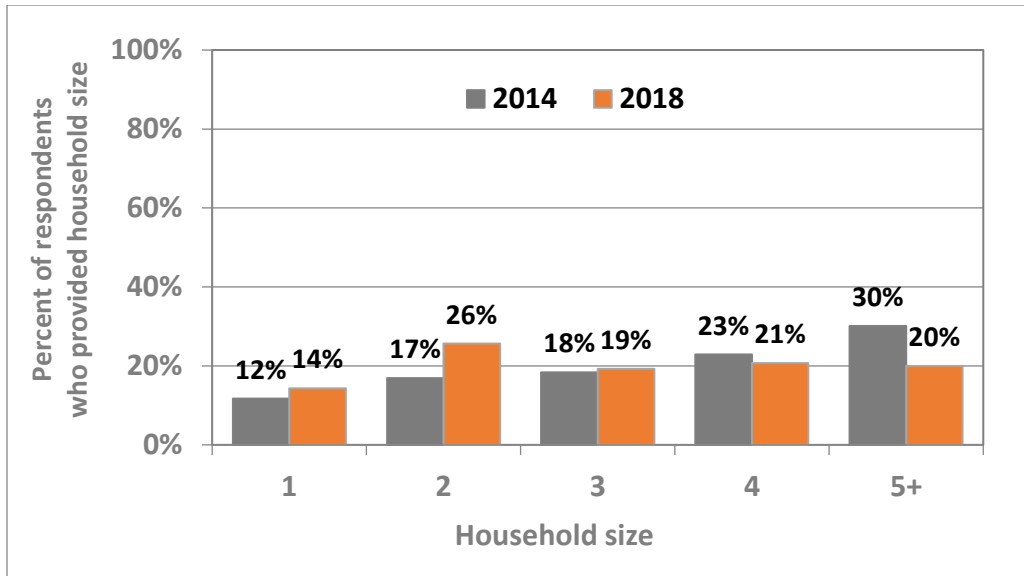| HH Size	Count 2014	% of 2014 Respondents	Count 2018	% of 2018 Respondents
1	55	9.5%	266	11.6%
2	79	13.6%	476	20.8%
3	86	14.9%	358	15.6%
4	107	18.5%	385	16.8%
5	81	14.0%	199	8.7%
6	30	5.2%	100	4.4%
7	21	3.6%	42	1.8%
8	2	0.3%	13	0.6%
9	5	0.9%	6	0.3%
10	1	0.2%	5	0.2%
11			2	0.1%
12	1	0.2%	1	0.04%
14			2	0.1%
15			1	0.04%
Missing	111	19.2%	435	19.0%
Total	**579**		**2,291**	

Figure B9: Household size, 2014 vs. 2018 survey

More respondents in 2018 listed themselves as unemployed compared to 2014 (Table B15 and Figure B10), although more were employed full-time (31% in 2018 vs. 25% in 2014) and fewer were employed part-time (12% in 2018 vs. 18% in 2014).

In the 2014 survey, only 2 respondents listed their occupation as "student." The "student" category was not included as an option for employment in 2014. In the 2018 survey, 70% of students were full-time, 18% part-time and the remainder did not complete the question. The higher percentage of students in the 2018 survey reflects both rewording of the employment question and different sampling venues, since some surveys were collected at health education classes for teens.

Table B15: Employment status of respondents, 2014 vs. 2018 survey

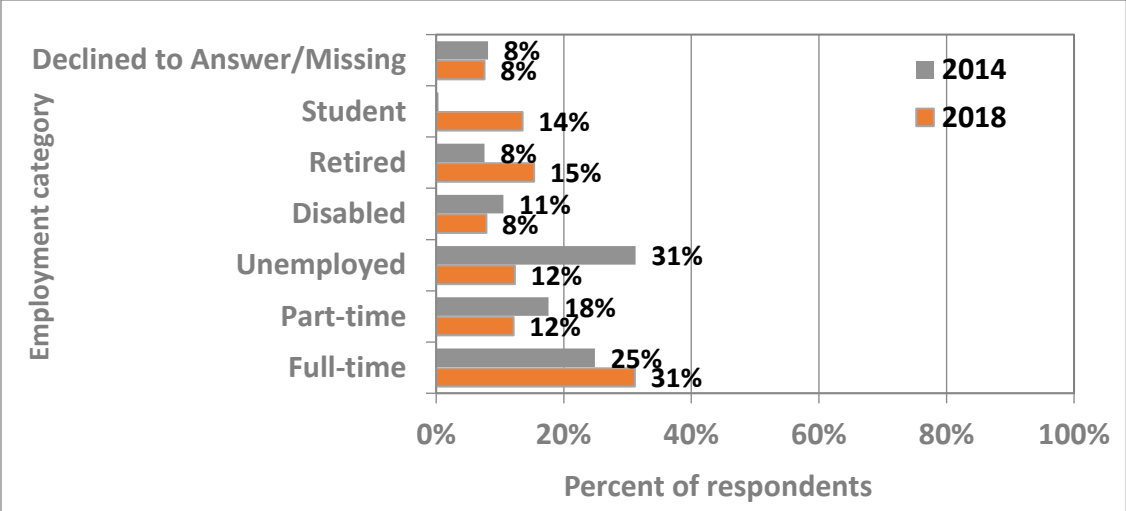| Employment Status	Count 2014	% of 2014 Respondents	Count 2018	% of 2018 Respondents
Full-time	144	24.9%	714	31.2%
Part-time	102	17.6%	278	12.1%
Unemployed	181	31.3%	283	12.4%
Disabled	61	10.5%	180	7.9%
Retired	44	7.6%	352	15.4%
Student	NA	NA	310	13.5%
Declined to Answer/Missing	47	8.1%	174	7.6%
Total	579		2,291	

Figure B10: Employment status of respondents, 2014 vs. 2018 survey

Section V Health, Mental Health and Dental Care

Respondents' perception of their own health status is depicted in Figure B11. In 2014 82% of respondents indicated they were in good, very good or excellent health compared to 79% in 2018. A high proportion of 2018 respondents, however, did not answer this question.
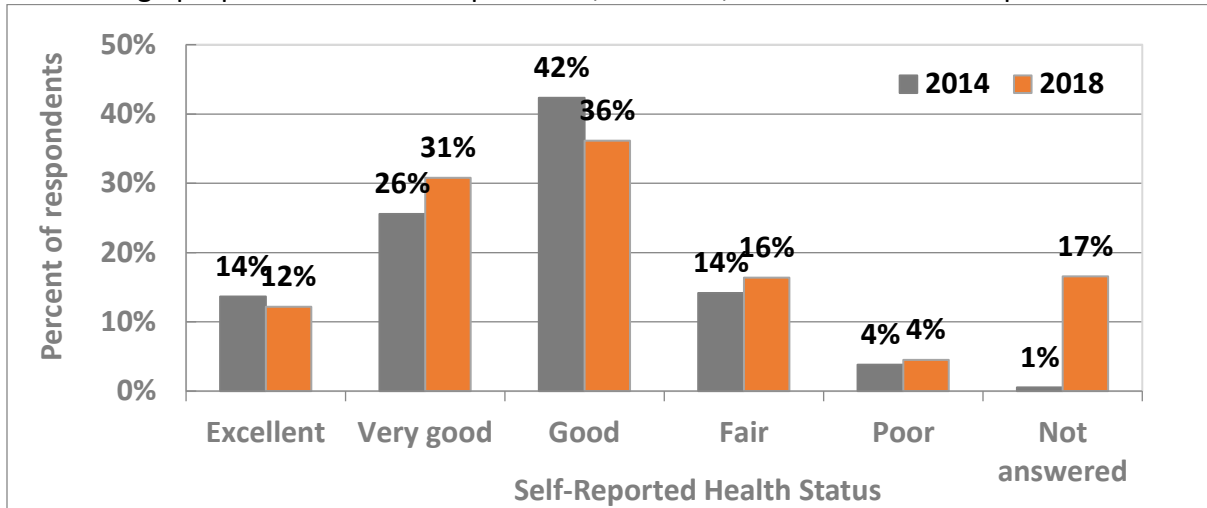

Figure B11: Respondents' perception of their own health, 2014 vs. 2018 survey

Respondents with annual household incomes below $20,000 were more likely to report fair health (25%) than respondents countywide (16%) (Figure B12). A total of 79% of respondents countywide ranked their health as good, very good or excellent compared to only 66% of low-income respondents.
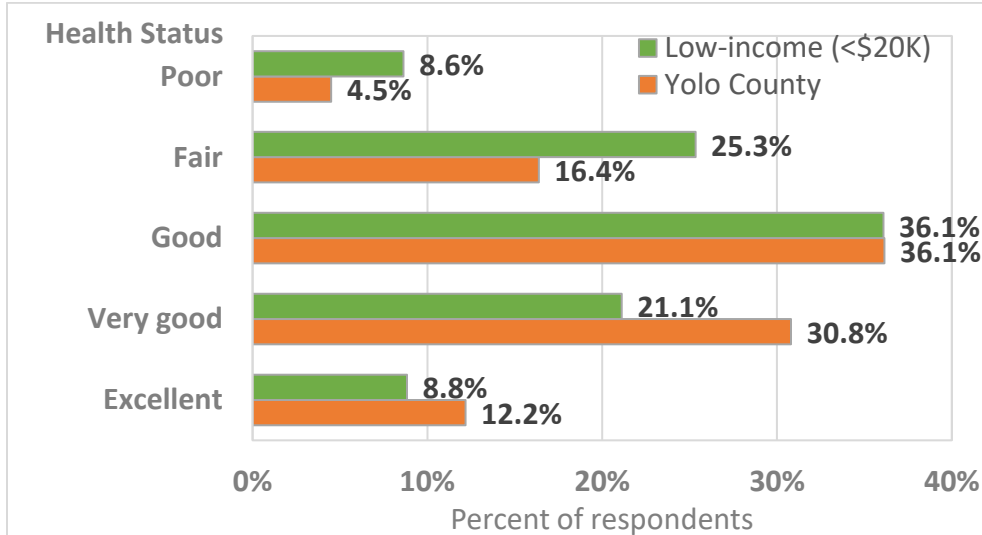

Figure B12: Respondents' perception of their own health, low-income (<$20K) vs. county

The self-reported prevalence of chronic conditions in 2018 was similar to that in 2014 (Figure B13), although a higher percentage of respondents reported having chronic lung disease (CLD). This may be in part due to the older age of the respondents in the 2018 survey (17% were aged 65 and up vs. 8% in 2014). Obesity was added as a chronic condition in 2018, so no value is presented for 2014 respondents. Obesity was the most common chronic condition. Obesity prevalence of 22% in the 2018 survey closely matches the 20% prevalence reported for Yolo County residents in the 2015-2016 California Health Interview Survey (CHIS).
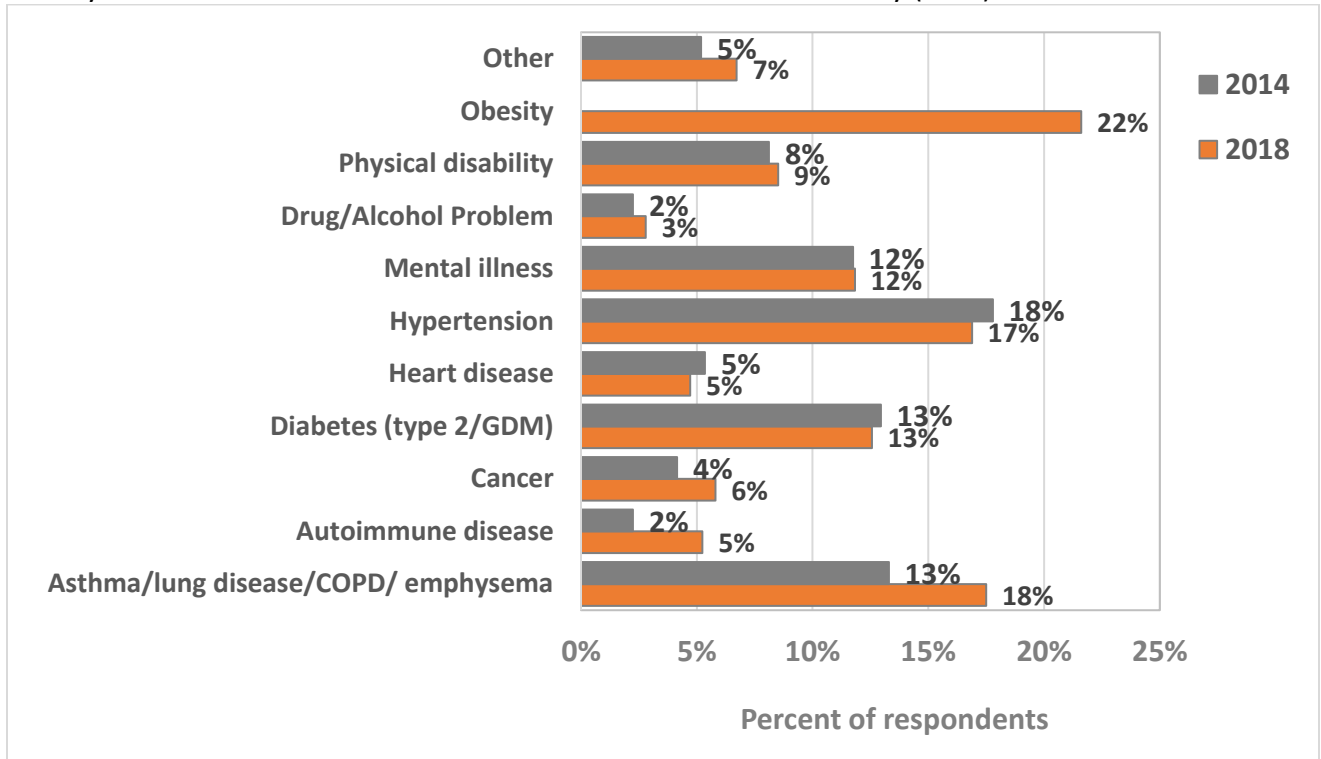

Figure B13: Respondents' self-report of chronic health conditions, 2014 vs. 2018 survey
Low-income respondents (<$20K annually) had significantly higher prevalence of hypertension, type 2 diabetes, mental illness, physical disability, heart disease, and drug/alcohol problems (Figure B14).
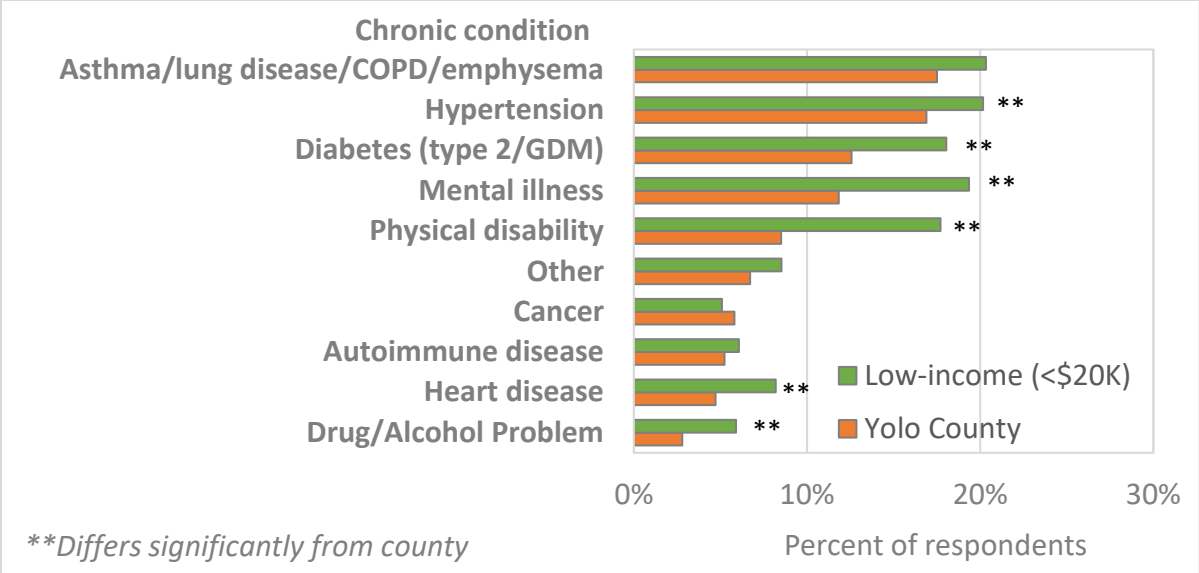
Figure B14: Chronic conditions, low-income (<$20K) vs. county

Obeisty was the top chronic condition in all regions (Table B16) excepting the North East and South West, and was higher than the countywide prevalence of 22% in the Central region at 27%. Prevalence of hypertension (high blood pressure) was highest in the South West region at 23% vs.17% countywide. Prevalence of chronic lung disease (CLD) stood at 18% countywide, ranging from lows of 6% in the South East region and 11% in the South West to highs of 20% in the East and North East regions. Prevalence of diabetes ranged from a low of 8% in the South to a high of 16% in the North East, with most regions falling between 13% and 16%. Prevalence of mental illness was relatively uniform across the county, ranging from 10% (North East region) to 14% (Central region).

Table B16: Prevalence of chronic conditions by region

Rank	County	Central (Woodland)	East (West Sac)	North East	North West	South (Davis)	South East (Clarksburg)	South West (Winters)
	n=2,291	n=566	n=752	n=194	n=96	n=516	n=16	n=137
1	Obesity (22%)	Obesity (27%)	Obesity (21%)	Asthma/CLD/COPD (20%)	Obesity (19%)	Obesity (19%)	Obesity (19%)	Hypertension (23%)
2	Asthma/CLD/COPD (18%)	Hypertension (17%)	Asthma/CLD/COPD (20%)	Obesity (18%)	Hypertension (17%)	Asthma/CLD/COPD (16%)	Cancer (13%)	Obesity (22%)
3	Hypertension (17%)	Asthma/CLD/COPD (17%)	Hypertension (17%)	Diabetes (Type 2/GDM) (16%)	Diabetes (Type 2/GDM) (15%)	Hypertension (15%)	Asthma/CLD/COPD tied #3 (6%)	Asthma/CLD/COPD tied #3 (11%)
4	Diabetes (Type 2/GDM) (13%)	Diabetes (Type 2/GDM) tied #4 (14%)	Diabetes (Type 2/GDM) (14%)	Hypertension (16%)	Asthma/CLD/COPD (14%)	Mental Illness (13%)	Hypertension tied #3 (6%)	Mental Illness tied #3 (11%)
5	Mental Illness (12%)	Mental Illness tied #4 (14%)	Mental Illness (11%)	Mental Illness tied #5 (10%)	Other (7%)	Diabetes (Type 2/GDM) (8%)	Other tied #3 (6%)	Diabetes (Type 2/GDM) (10%)
				Physical Disability tied #5 (10%)				

A higher proportion of respondents (29%) reported having physical conditions that limited their physical activities in the 2018 survey than in 2014, when the proportion was 25% (Figure B15). Again, this may reflect a higher proportion of respondents in 2018 who were seniors (17% aged 65 and up).
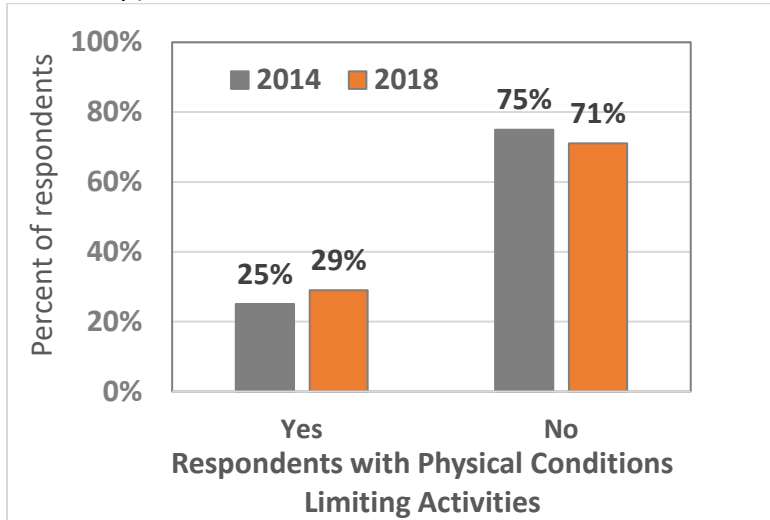

Figure B15: Prevalence of physical conditions that limited respondents' activities, 2014 vs. 2018 survey

Low-income respondents were 1.5 times more likely to have a physical condition that limited activities than respondents countywide (Figure B16).
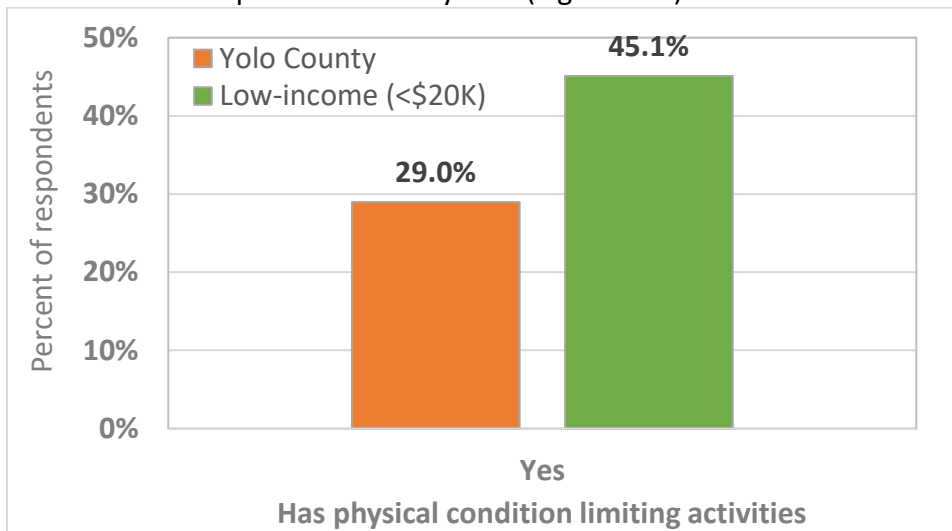
Figure B16: Physical disability, low-income (<$20K) vs. county

In 2014, a substantially higher percentage of respondents with physical limitations reported difficulty in working (50%) than those in 2018 (28%) (Figure B17). Also, more respondents with a physical limitation in the 2014 survey reported difficulty walking, climbing stairs, etc. compared to the 2018 respondents (76% vs. 66%, respectively). It is unclear whether this difference is due to sampling a smaller number of elderly, retired adults in 2014, or if the difference represents an improvement in the physical health of the population. In 2014, 15% of

respondents had 3 or 4 of the 4 listed limitations; in 2018 that jumped to 29%. This difference may reflect sampling more elderly persons in 2018.
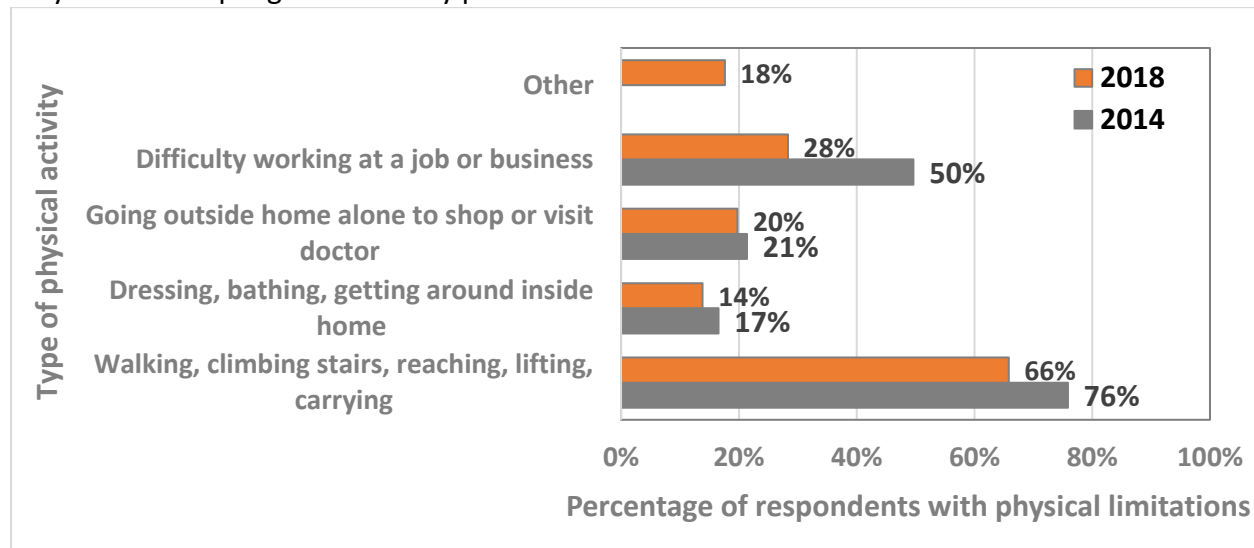
Figure B17: Percentage of respondents with physical limitations by type of limitation, 2014 vs. 2018 survey

Table B17: Percentage of respondents with physical limitations by activity type, 2014 vs. 2018 survey

Description of Physical Limitation	Count 2014 (n=145)	% with limitations 2014	Count 2018 (n=664)	% with limitations 2018
Walking, climbing stairs, reaching, lifting, carrying	110	75.9%	437	65.8%
Dressing, bathing, getting around inside home	24	16.6%	92	13.9%
Going outside home alone to shop or visit doctor	31	21.4%	131	19.7%
Difficulty working at a job or business	72	49.7%	188	28.3%
Other	Not asked		117	17.6%
Total with Physical Limitations:	**145**	**25.0%**	**664**	**29.8%**

With regard to mental health (MH), a slightly higher percentage of respondents reported needing to obtain MH services in 2018 vs. 2014 (Figure B18), but 5% of 2018 respondents did not answer the question.
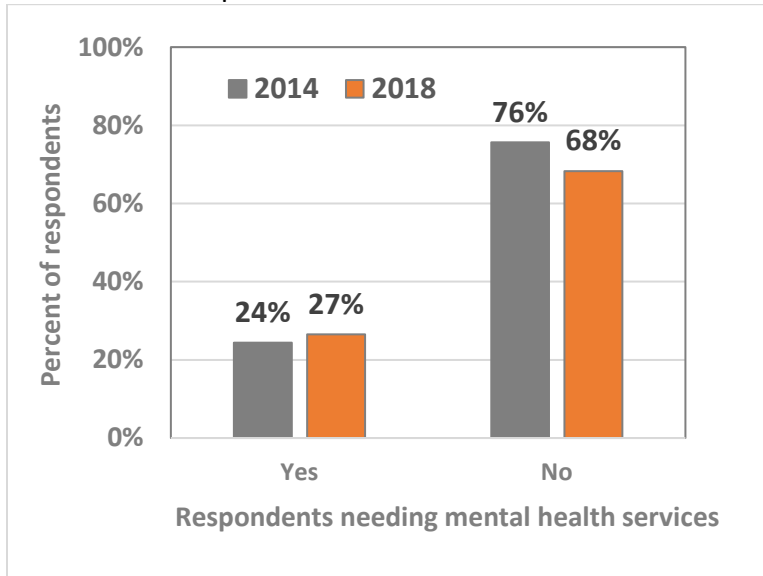
Figure B18: Percentage of respondents feeling a need for MH services, 2014 vs. 2018 survey
There was little change in the percentage of respondents who needed MH services and actually saw a MH provider (Figure B17). While there was little change in the percent of respondents receiving MH services, their reasons for not seeing a MH provider changed (Figure B19). Concern about cost, not knowing how to locate a MH provider, fear of others finding out about a MH condition, and lack of insurance for MH services were all lower in 2018 than 2014. Several respondents indicated they could only select ONE option in the online version of the survey, therefore the additional responses in the other category were grouped by category.

Figure B19: Percentage of respondents needing MH services who saw a provider, 2014 vs. 2018 survey
Other reasons that could not be categorized included "never got around to setting up an appointment," "I relieved my stress," "broken system and lack of services," "I feel I need to see a doctor," "I'm still deciding if I should," "did not think problem was serious enough to warrant

help," "it didn't feel like I was at the point of needing to, but I did think about it," "I didn't and still don't agree with the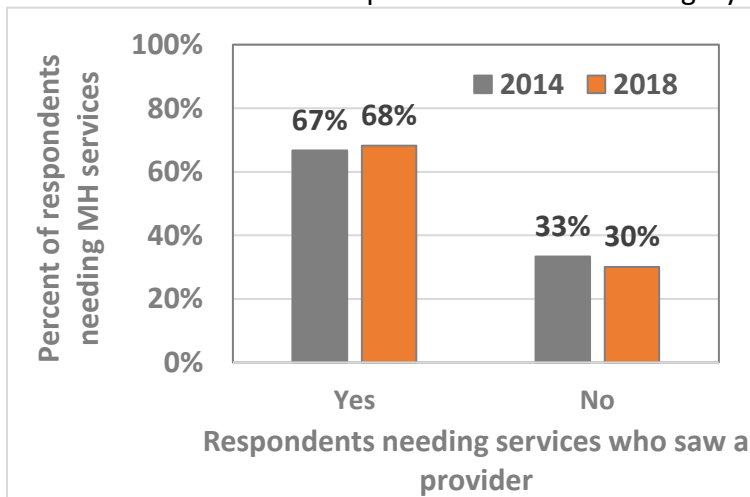 doctor," "I used other methods to cope," "I kept putting it off," "I knew it was stress-related. Had too much going on and once I was able to get a routine going, everything was much better," "it's impossible to get mental health here and that is awful," "used therapy through work (EAP) but was dropped due to therapist being 'unable to help'," and "I have XXX and the mental healthcare portion is not effective due to standard protocol and excessive demand for behavior modification clinics."
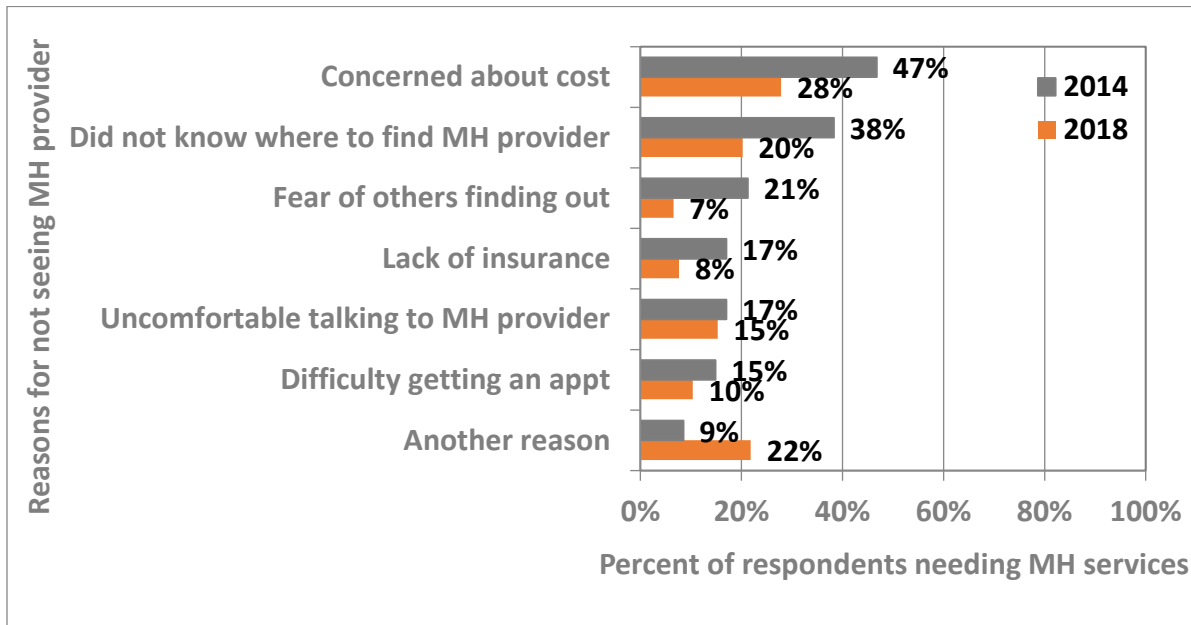
Figure B20: Reasons for not seeing a MH provider, 2014 vs. 2018 survey

Two-thirds of respondents in the 2018 survey (67%) had dental insurance, more than in the 2014 survey when about half of respondents (52%) did (Table B18 and Figure B19).

Table B18: Prevalence of dental insurance, 2014 vs. 2018 survey

Dental Insurance	Count 2014	% of 2014 Respondents	Count 2018	% of 2018 Respondents
Yes	301	52.0%	1,540	67.2%
No	278	48.0%	449	19.6%
Unsure	NA		146	6.4%
Missing			156	6.8%
Total surveys	579		2,291	
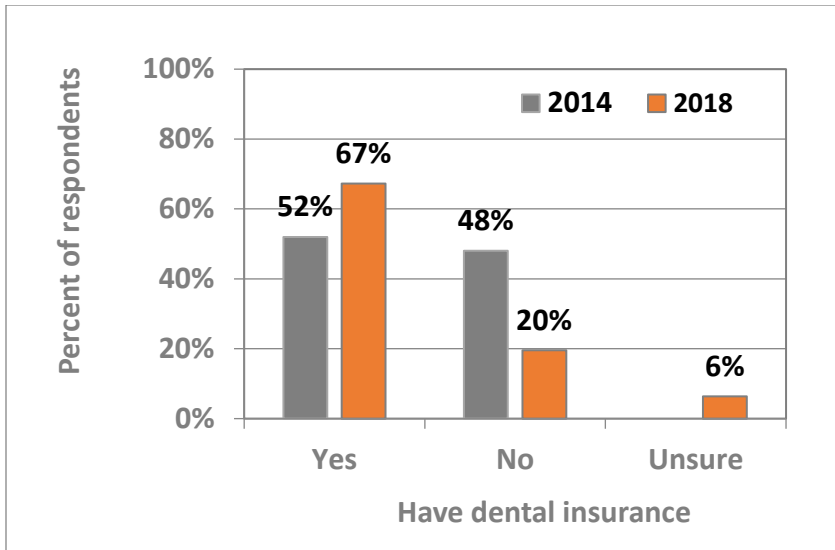
Figure B21: Prevalence of dental insurance, 2014 vs. 2018 survey

Respondents were about twice as likely to visit the dentist in the past year if they had health insurance (Figure B22).
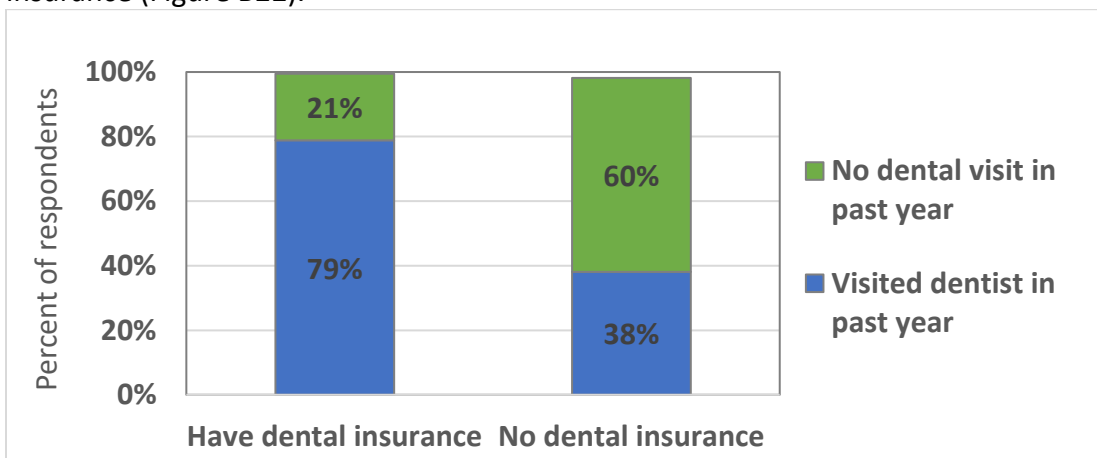
Figure B22: Dental insurance vs. dental utilization, 2018 survey

Section VI Access to Care

About half as many respondents lacked health insurance in the 2018 survey vs. 2014 (Table B19). The overall percentage without health insurance in 2018 was about 1 in 10 (9%) down from 1 in 5 (20%) in 2014. This is likely due to the implementation of the Affordable Care Act (ACA).

Table B19: Prevalence of health insurance, 2014 vs. 2018 survey

Health Insurance	Count 2014	% of Respondents 2014	Count 2018	% of Respondents 2018*
Yes	464	80.1%	1,933	91.2%
No	115	19.9%	187	8.8%
Total	579		2,120	

171 respondents (7.7%) did not answer this question

Only about one-third of 2018 respondents (36%) had Medi-Cal insurance compared to over half (52%) of 2014 respondents (Figure B23). It is unclear why the percentage of respondents with Medi-Cal was lower in 2018, given the expansion of Medi-Cal under the ACA. However, private employer coverage increased, suggesting more 2018 respondents were employed and therefore had insurance available to them through an employer. Overall, the percentage of respondents with health insurance obtained through the government fell from 71% in 2014 to 59% in 2018.
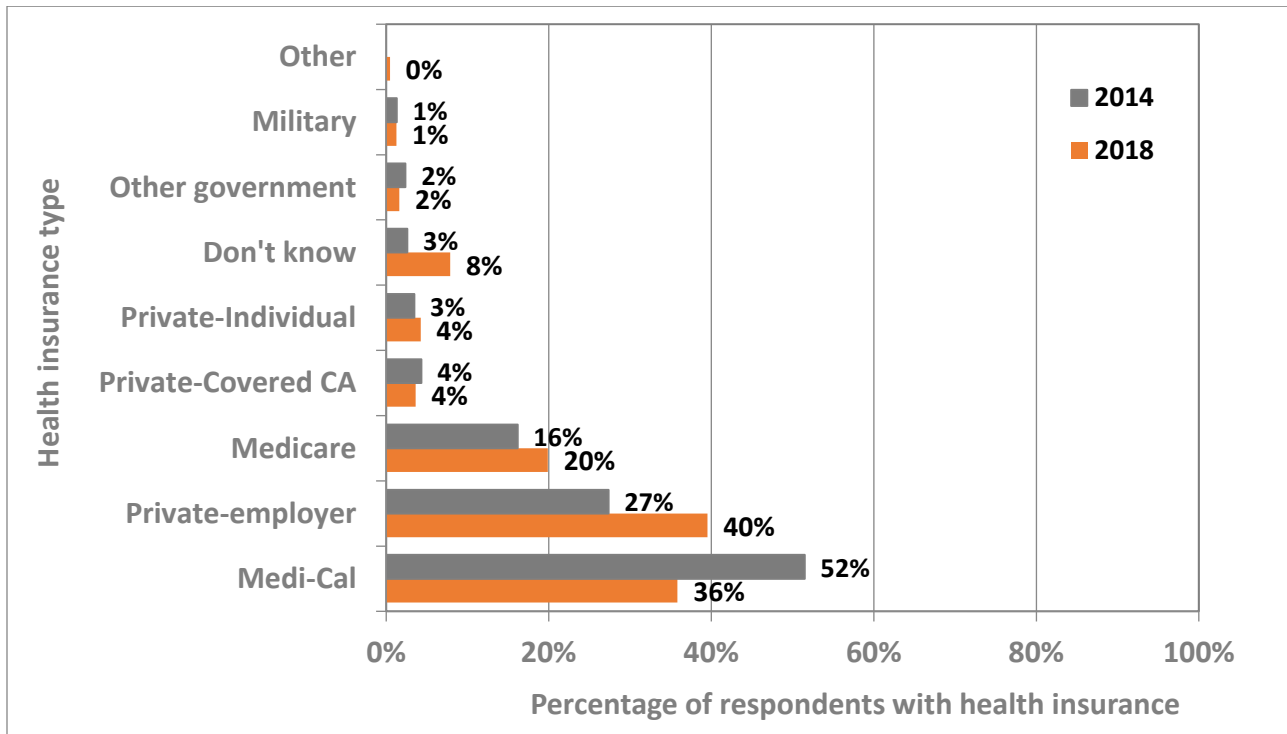
Figure B23: Type of health insurance coverage, 2014 vs. 2018 survey.

The percentage of all respondents without health insurance fell in all cities and areas in the county (Figure B24). The city with the lowest percentage of uninsured respondents was Davis.
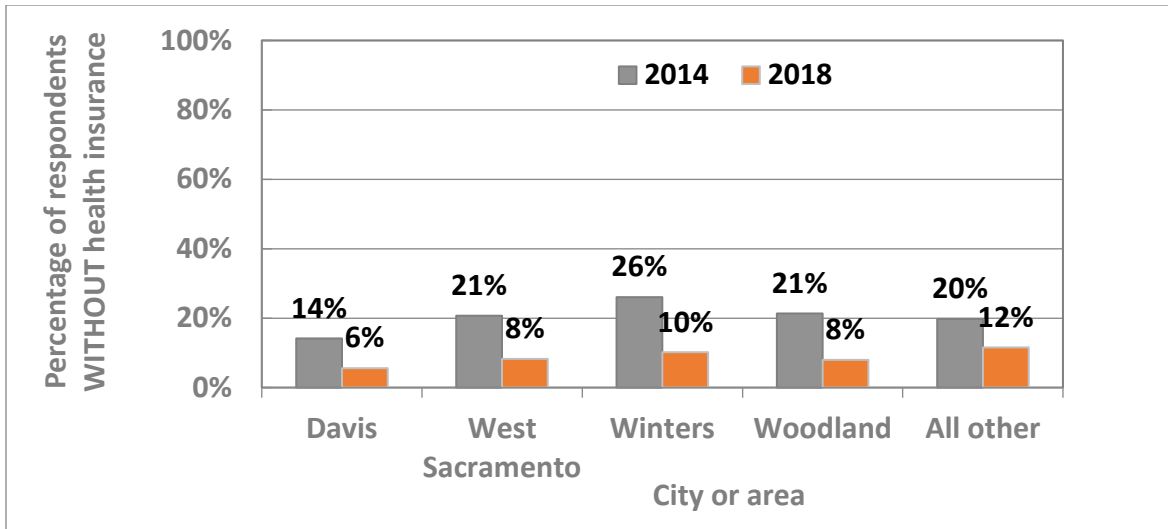
Figure B24: Percentage of respondents without health insurance by city, 2014 vs. 2018 survey

The percentage of 2018 respondents without health insurance halved in most age groups, and for those aged over 65, the percentage uninsured dropped to 3% (Figure B25).
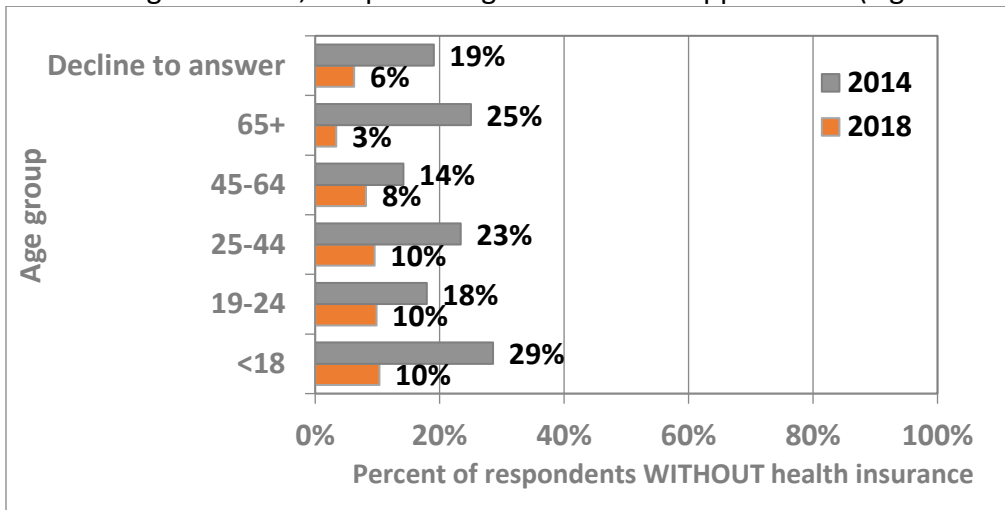
Figure B25: Percentage of respondents without health insurance by age group, 2014 vs. 2018 survey

The percentage of 2018 respondents without insurance dropped most dramatically for Asians, Blacks and Hispanics (Figure B26).
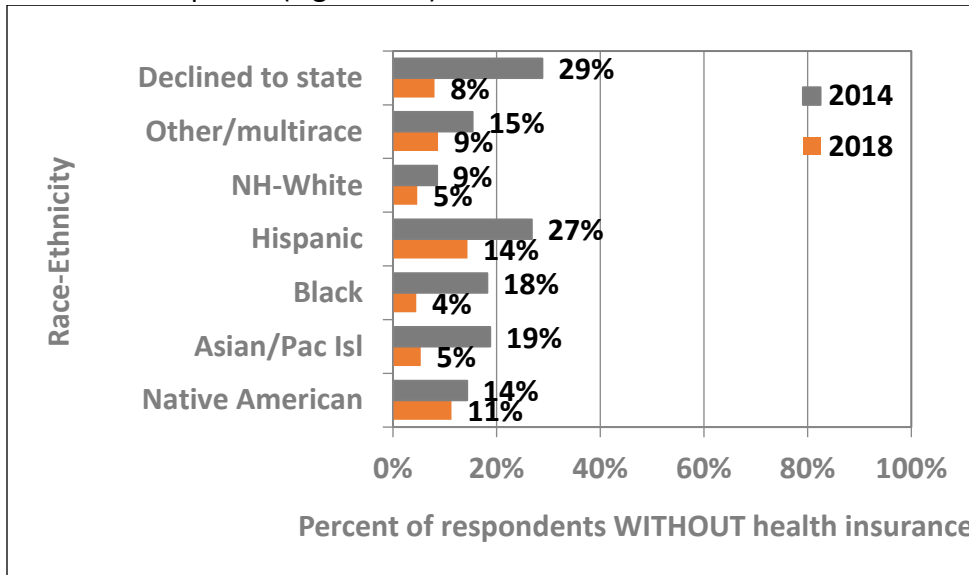
Figure B26: Percentage of respondents without health insurance by race-ethnicity, 2014 vs. 2018 survey

Among respondents in households with annual incomes <$20,000 and in households with income ranging $30,000 to $49,999, about 1 in 10 were uninsured (Figure B27). The percentage increased to 16% (about 1 in 6) for respondents in households with incomes between $20,000 and $29,999. At higher levels of household income (>$50,000), few respondents were uninsured.
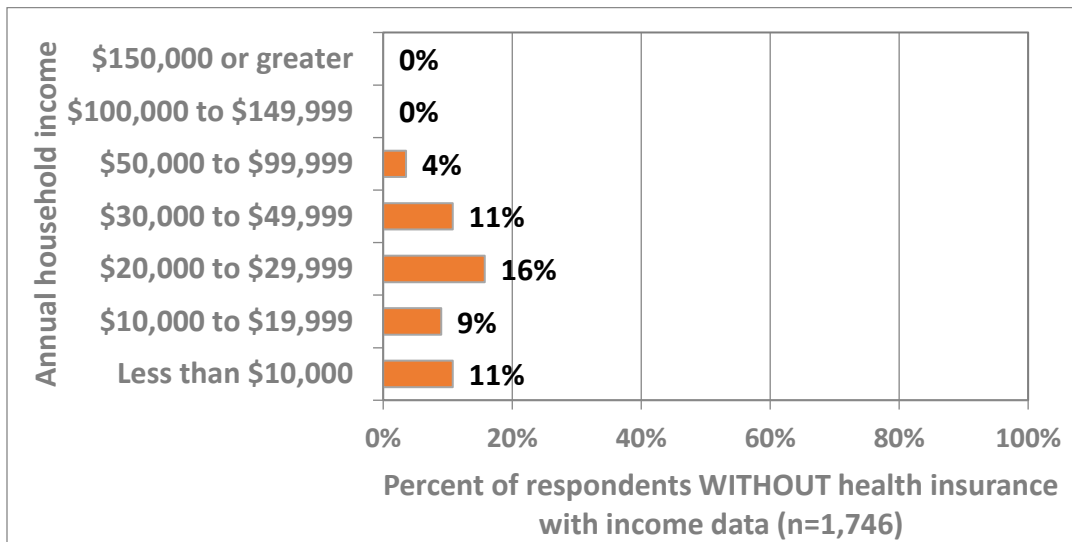
Figure B27: Percentage of 2018 respondents without health insurance by household income

Fewer respondents were uninsured in 2018 than 2014 in all employment categories (Figure B28). Lack of insurance fell to 5% in 2018 from 15% in 2014 for full-time employed respondents, and to 11% from 22% in 2014 for part-time employed respondents. The unemployed still lacked health insurance at higher rates than other categories of employment (18% in the 2018 survey).
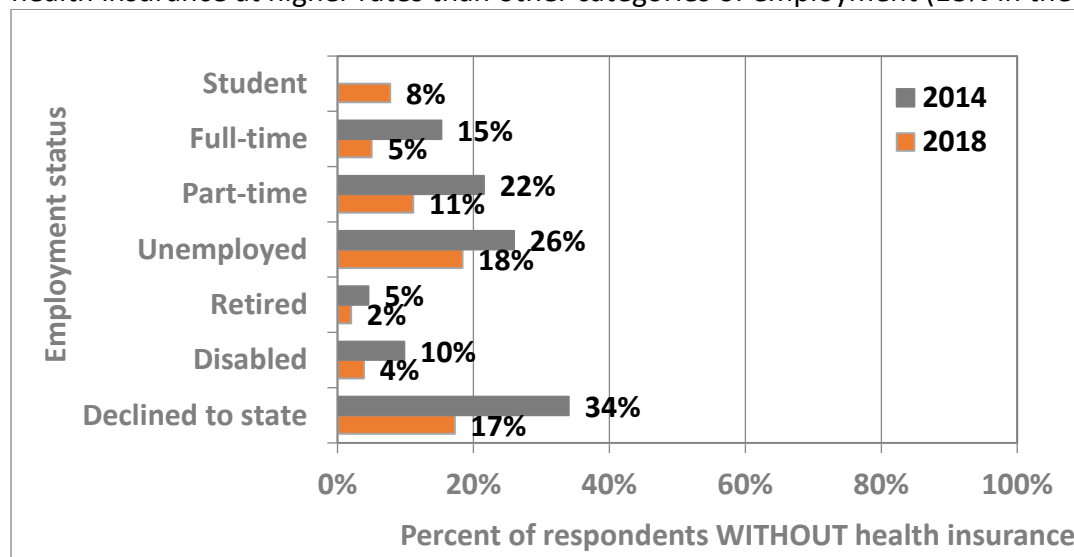
Figure B28: Percentage of respondents without health insurance by employment status, 2014 vs. 2018 survey

More respondents without health insurance answered the question about their plans to apply for Covered California in 2018 than 2014 (see the "not answered" category in Figure B29). More of the uninsured in 2018 planned to apply for insurance through Covered California in 2018 than 2014 (1 in 4 respondents in 2018 [25%] vs. 1 in 5 respondents [20%] in 2014). The percentage of respondents who were not planning to apply for Covered California was virtually unchanged, but slightly more respondents (41%) were unsure about their plans in 2018 than in 2014 (37%).
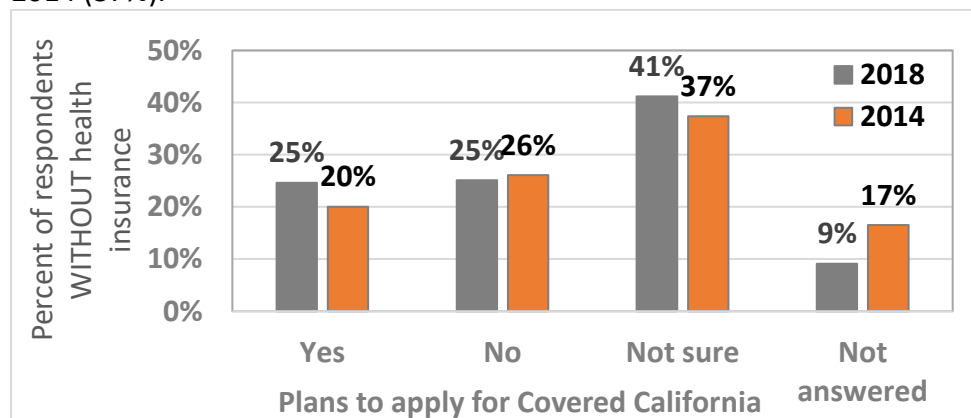
Figure B29: Plans of uninsured respondents to apply for Covered California insurance, 2014 vs. 2018 survey

More respondents answered the question about eligibility for Medi-Cal or Medicare insurance coverage in 2018 than 2014, similar to the question about plans to apply for Covered California above. More respondents were aware of their Medi-Cal or Medicare eligibility in 2018 (Figure B30) than in 2014 (about 1 in 5 [19%] in 2018 vs. 1 in 8 respondents [12%] in 2014). The

percentage who did not know about their eligibility, or were unsure, differed little between 2014 and 2018.
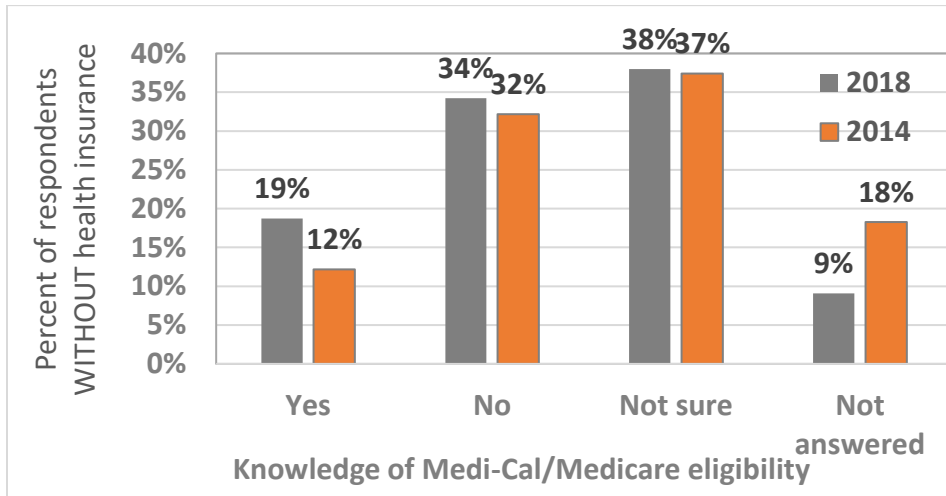
Figure B30: Knowledge of uninsured respondents about their eligibility for Medi-Cal or Medicare, 2014 vs. 2018 survey

About three-quarters (78%) of 2018 survey respondents thought health screenings were extremely or very important (Figure B31).
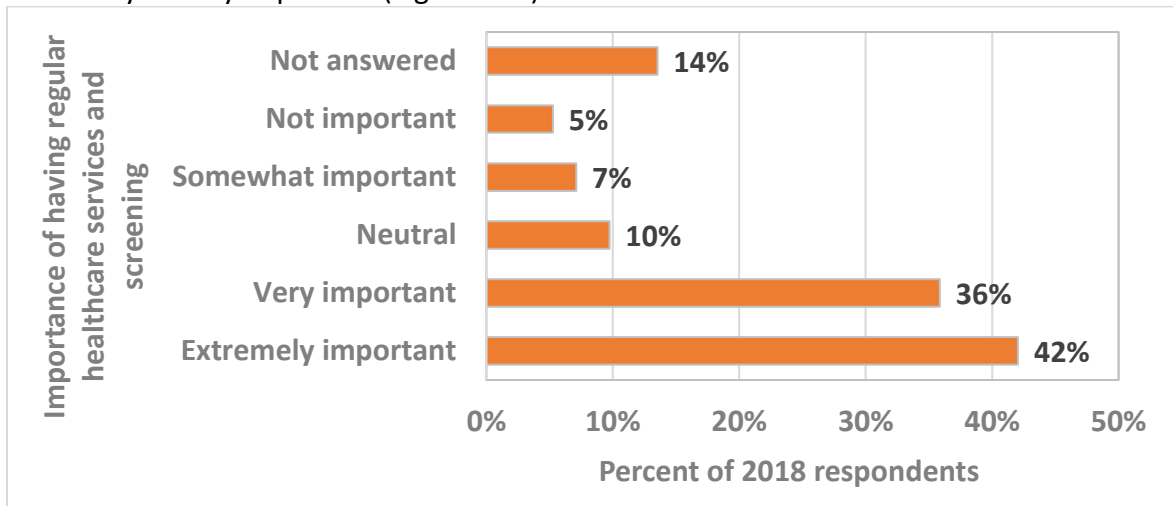
Figure B31: Respondents' perception of the importance of health screenings

Eight out of 10 respondents to the 2018 survey had seen a healthcare professional in the past year, similar to the percentage reported in 2014 (Figure B32).
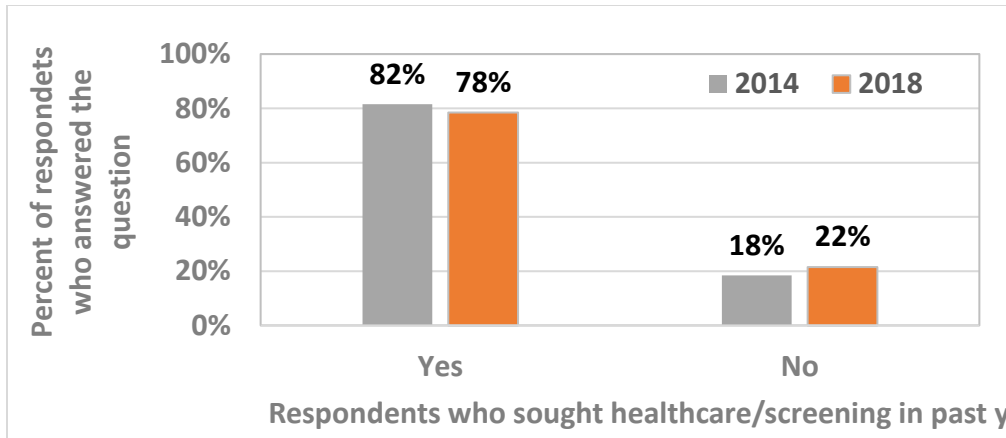
Figure B32: Respondents' use of healthcare services or health screening in the past year, 2014 vs. 2018 survey

Reasons for avoiding healthcare or screenings changed since 2014, when the number one reason for respondents with no healthcare was lack of health insurance (26%), down to 12% in 2018. Aside from lacking health insurance, top reasons in 2018 included being too busy (20%), unsure (17%), and having to wait too long to see a doctor (11%) (Figure B33). The latter was down from 21% in 2014, suggesting there has been an improvement in the wait times to see a doctor.
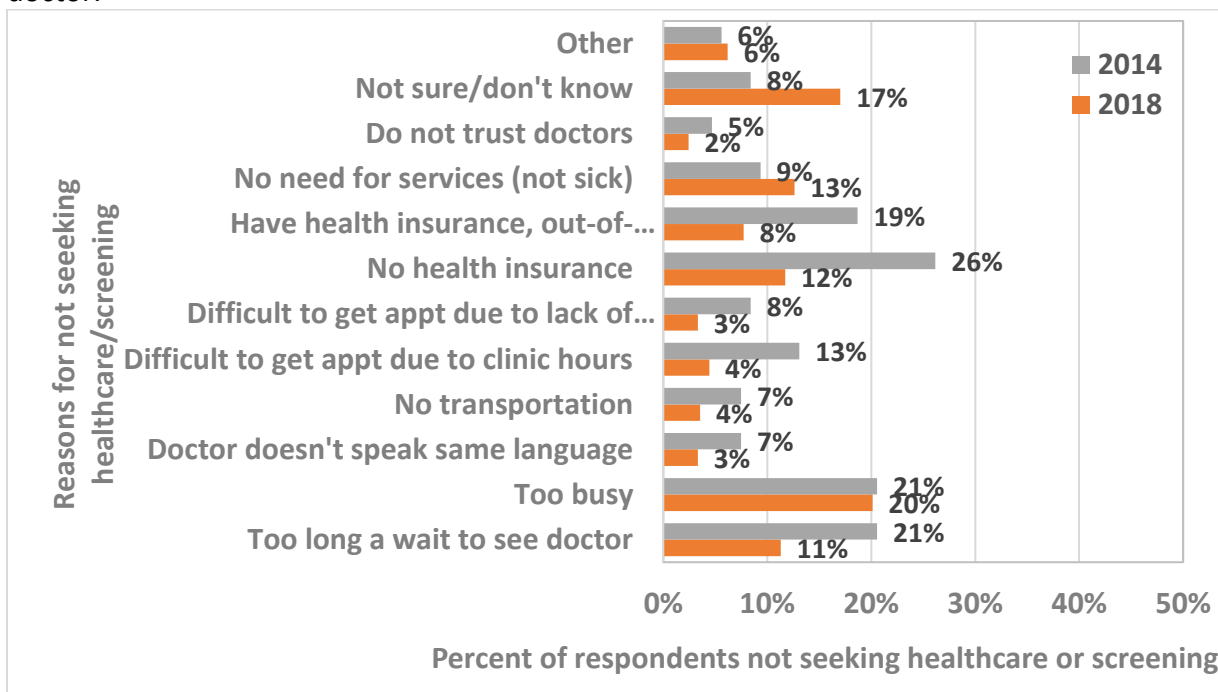
Figure B33: Reasons why respondents did not receive healthcare, 2014 vs. 2018 survey

The number of doctor visits changed somewhat from 2014, in that more 2018 respondents saw a doctor 2 to 5 times in a year (53%) than in 2014 (47%), and fewer in 2018 had >6 visits (19%) (Figure B34).
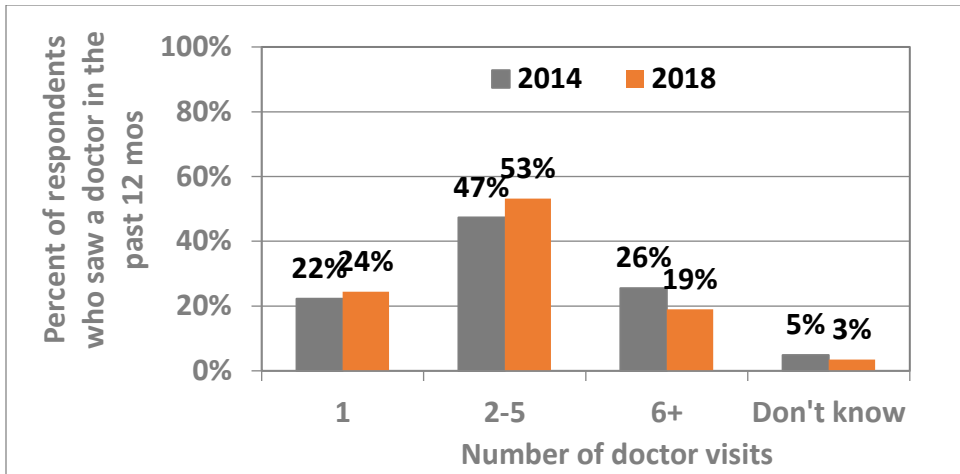
Figure 34: Number of doctor visits in past year, 2014 vs. 2018 survey

Among respondents who did see a healthcare provider in 2018, 1 in 5 (20%) wanted to see the doctor more often, which is fewer than the 1 in 4 respondents in 2014 (25%) (Figure B35).
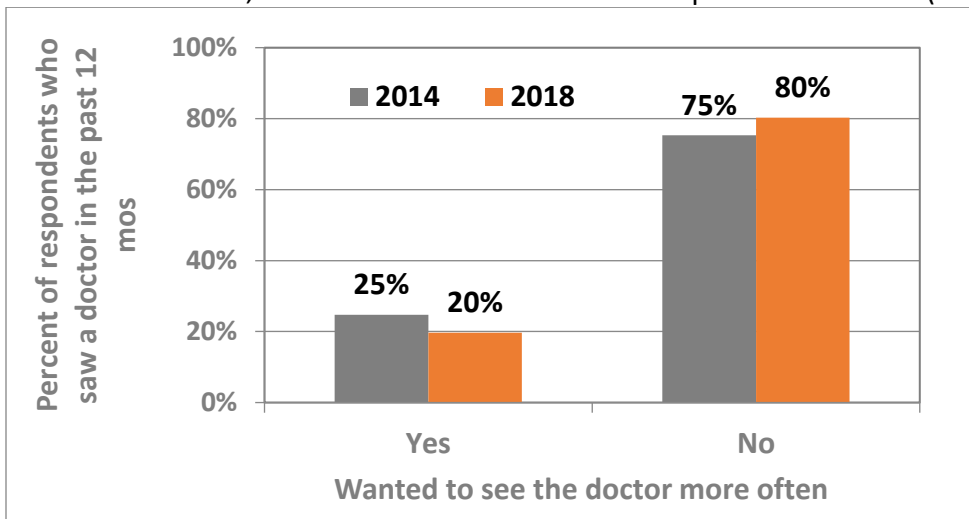
Figure B35: Percentage of respondents who saw a doctor and wanted to see the doctor more often, 2014 vs 2018 survey

Sixty-two percent of 2018 respondents lived within 9 miiles of their healthcare provider (Table B20 and Figure B36), about the same percentage as 2014 respondents (64%). Slightly more respondents in 2018 lived 10 to 14 miles from their provider (18% in 2018 vs. 13% in 2014).

Table B20: Travel distance to provider's office, 2014 vs. 2018 survey

Travel Distance to Provider	Count 2014*	% of 2014 Respondents Answering Question	Count 2018†	% of 2018 Respondents Answering Question
0-4 mi	205	42.5%	822	39.9%
5-9 mi	101	21.0%	453	22.0%
10-14 mi	63	13.1%	368	17.8%
15-19 mi	38	7.9%	200	9.7%
20-24 mi	32	6.6%	94	4.6%
25-29 mi	17	3.5%	58	2.8%
≥30 mi	26	5.4%	65	3.2%
No. answering question	482		2,092	

*n=97 missing (16.8%); †n=229 missing (10.0%)
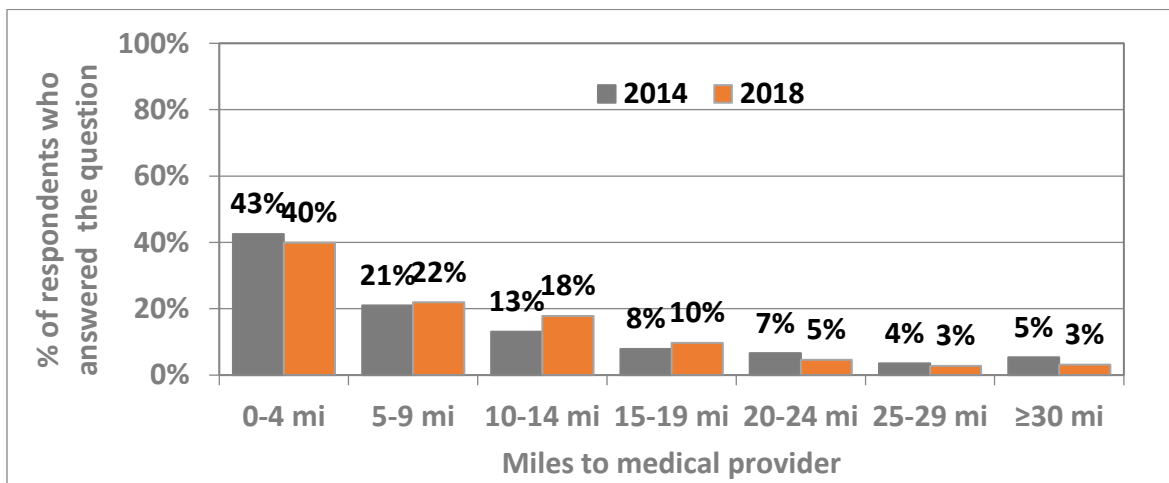
Figure B36: Travel distance to provider's office, 2014 vs 2018 survey

There were only minor differences in travel time to the provider's office in 2018 vs. 2014 (Table B21 and Figure B37). About half (47%) of 2018 respondents were within 15 minutes of their provider's office, and 37% traveled 15 to 29 minutes to reach their provider. Four percent of respondents were traveling 45 minutes or more to reach their provider.

Table B21: Travel time to provider, 2014 vs. 2018 survey

Travel Time	Count 2014*	% of 2014 Respondents Answering Question	Count 2018†	% of 2018 Respondents Answering Question
0-14 min	224	43.2%	971	47.0%
15-29 min	195	37.6%	763	36.9%
30-44 min	62	11.9%	239	11.6%
45-59 min	11	2.1%	55	2.7%
60+ min	27	5.2%	38	1.8%
No. answering question	519		2,066	

*n=60 missing (11.6%); †n=225 missing (9.8%)
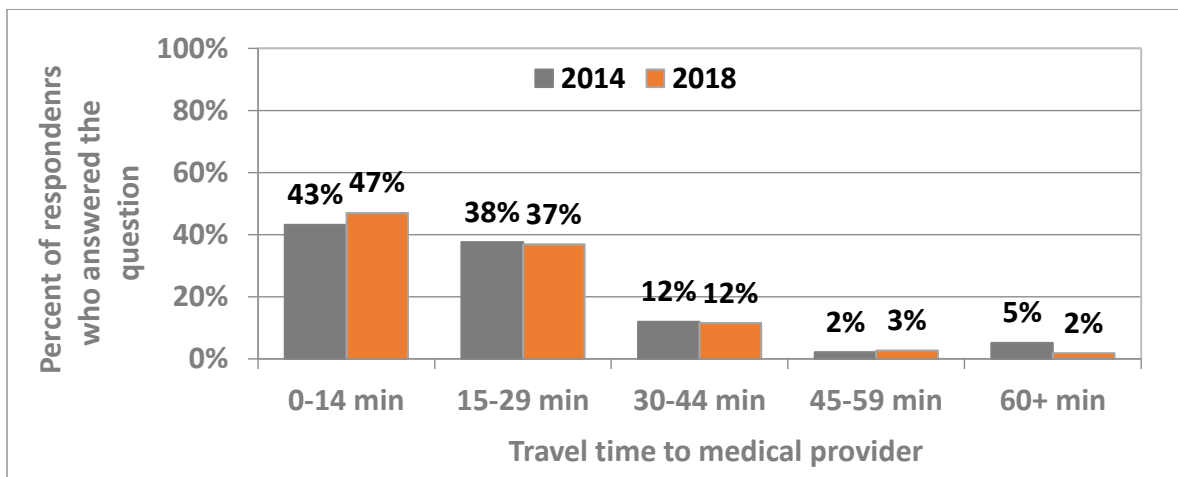
Figure B37: Travel time to provider's office, 2014 vs 2018 survey

There were a large number of missing responses in 2018 as well as responses that could not be classified or contained comments. These are excluded from Table B21. In future versions of the survey, it may be better to offer respondents ranges of days and/or weeks, and ask them about how long it took to obtain their LAST medical appointment rather than medical appointments in general. Many respondents commented on vast differences between the time to obtain an appointment with a primary care provider and a specialist.

The number of days to the next medical appointment differed little between 2018 and 2014 (Table B22 and Figure B38). Half of 2018 respondents were able to obtain an appointment within 3 days. Slightly more respondents in 2018 were able to obtain an appointment in 4 to 6 days (10% in 2018 vs. 7% in 2014); and slightly fewer had to wait 14 to 20 days (11% in 2018 vs. 16% in 2014).

Table B22: Number of days to next medical appointment, 2014 vs. 2018 survey

Days to Appointment	Count 2014*	% of 2014 Respondents Answering Question	Count 2018†	% of 2018 Respondents Answering Question
0-3 days	212	50.6%	694	50.4%
4-6 days	30	7.2%	141	10.2%
7-13 days	72	17.2%	235	17.1%
14-20 days	67	16.0%	150	10.9%
21-27 days	18	4.3%	77	5.6%
28 days+	20	4.8%	81	5.9%
No. answering question	419		1,378	

n= missing 160 (27.6%); †n=792 missing (34.6%) and n=121 with comment/unclassifiable range
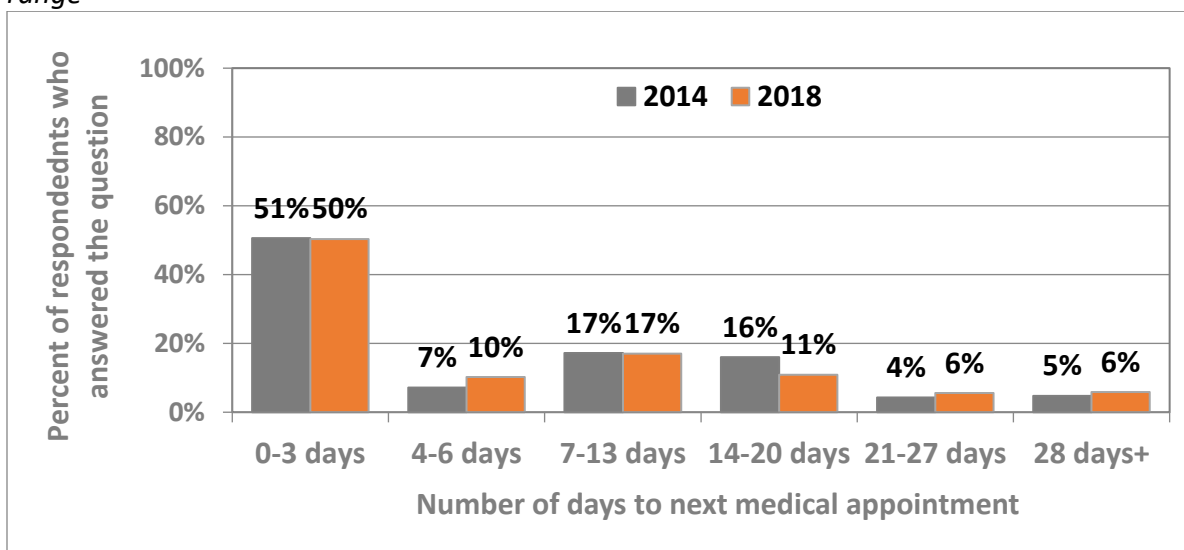
Figure B38: Number of days to next medical appointment, 2014 vs 2018 survey

There was considerable improvement in the percentage of 2018 respondents who were satisfied or very satisfied with the speed of obtaining a medical appointment (59%) compared to 2014 (48%) (Figure B39). Furthermore, a lower percentage (23%) responded with "neutral" in 2018.

The combination of slightly shorter waits for an appointment (Figure B38 above) and greater satisfaction with the speed to obtain the next appointment (Figure B39 below) suggests that patients have seen real improvements in the healthcare system.
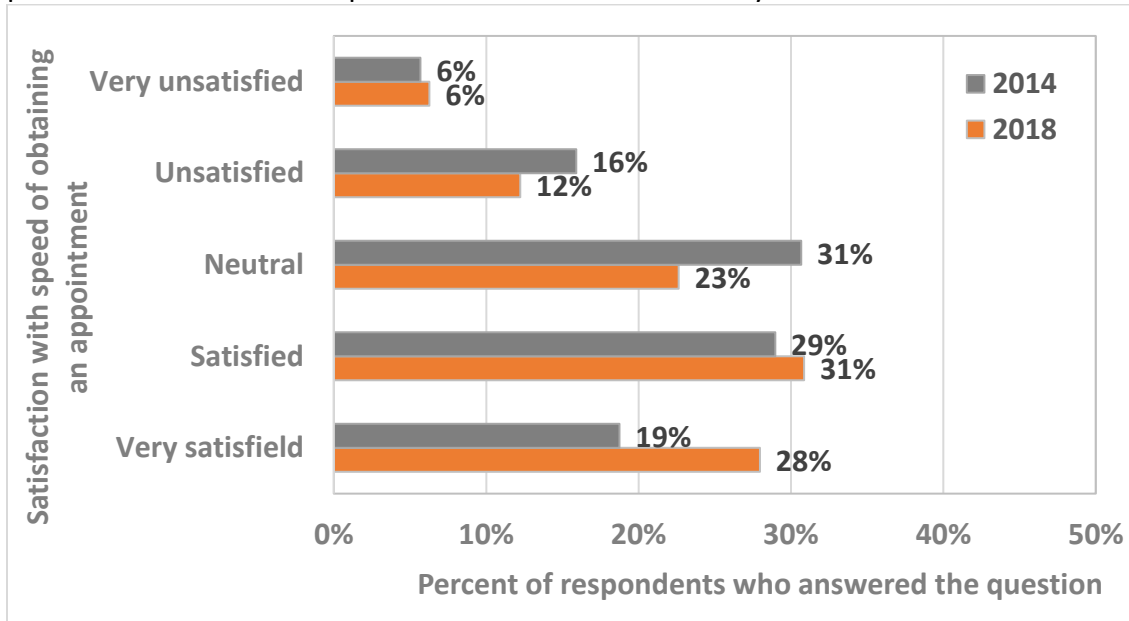
Figure B39: Satisfaction with the speed of obtaining a medical appointment, 2014 vs. 2018 survey

Section VII Illness and Injury

Slightly fewer 2018 respondents (23%) visited the Emergency Room (ER) in the past year than respondents in 2014 (Figure B40), and a higher percentage (75% or three-quarters) indicated that they had *not* visited the ER. Less frequent use of the ER corroborates the findings in Section V above that respondents waited fewer days to obtain medical appointments, and may have received urgent care in a clinic setting rather than the ER.
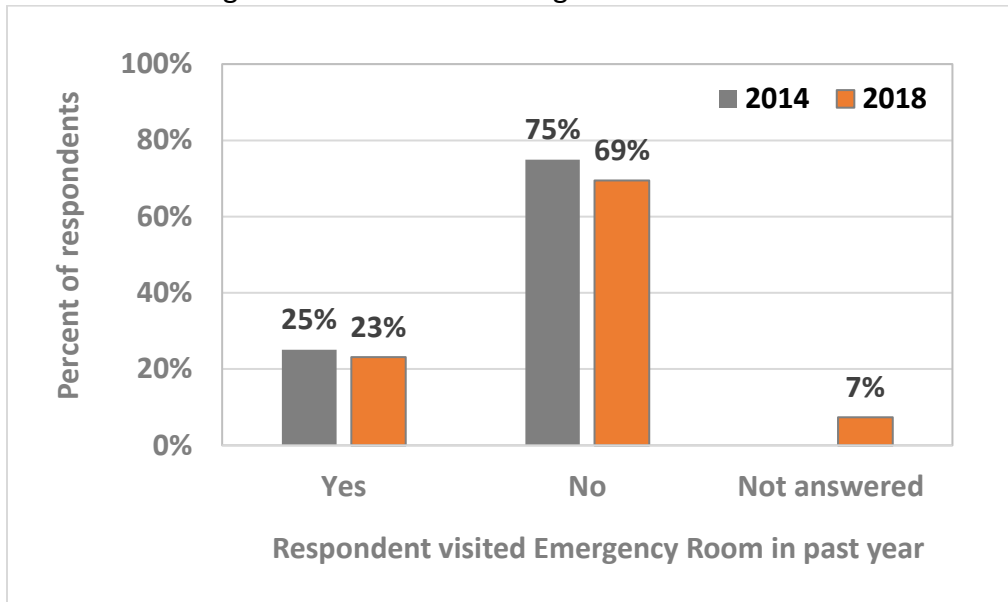
Figure B340: Respondents' use of the ER, 2014 vs. 2018 survey

There were some notable differences in reasons for visiting the ER among 2018 respondents compared to 2014 (Figure B41). Fewer 2018 respondents, about 1 in 5 (21%) became ill or injured before 8am or after 5pm on a weekday, compared to 1 in 4 (25%) of 2014 respondents. Fewer 2018 respondents (15%) indicated they used the ER because they couldn't get an urgent care appointment than 2014 respondents (20%). About one-third (31%) of 2018 respondents said they went to the ER because they had a life-threatening illness or injury compared to 22% in 2014. These findings suggest that more ER visits were for medical emergencies than urgent care, and that the ER is being used more appropriately.

Note: Respondents could indicate >1 reason, so totals do not equal 100%.
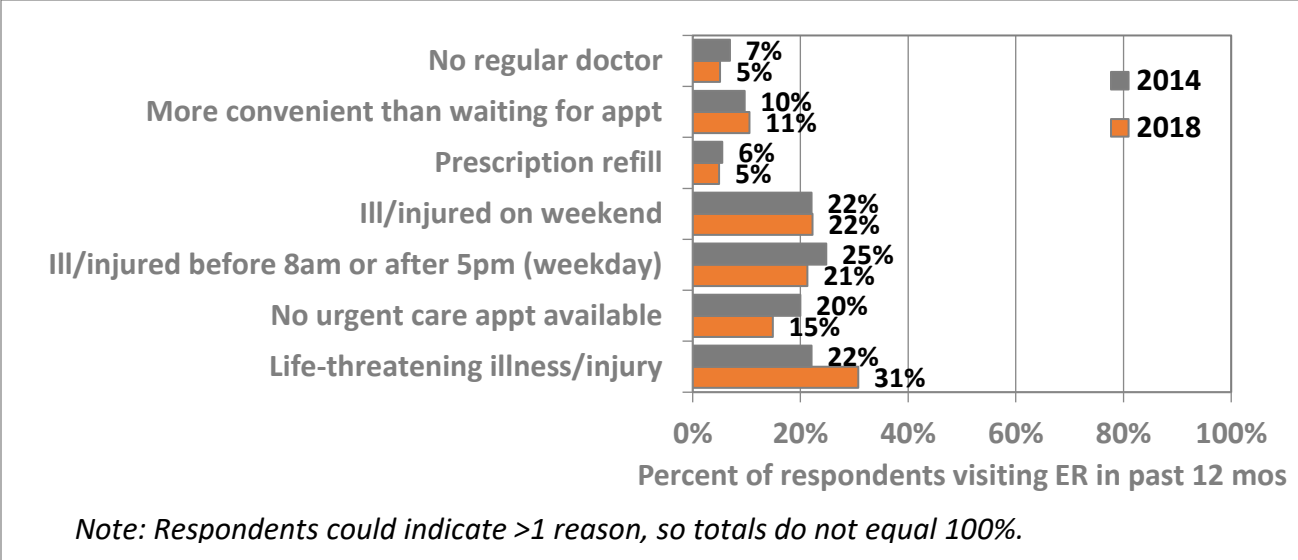
Figure B41: Reasons cited by respondents for visiting the ER, 2014 vs. 2018 survey

About 6 out of 10 (61%) of 2018 respondents who were injured on the job sought medical care for their injury, a higher percentage than in 2014 (52%) (Figure B42). Conversely, fewer of 2018 respondents (about one-third, 32%) failed to receive medical care for work-related injuries. Some of the reasons for not seeking care included it being "too much trouble," not needing care, "light sickness," "it wasn't a big illness," colds/flu, "it wasn't that bad,", being "too tired and lazy," and "it resolved itself." More concerning were responses such as "fear of mistreatment due to my transgender status," "because it was just too hot and I became really dehydrated," and "can't miss work."
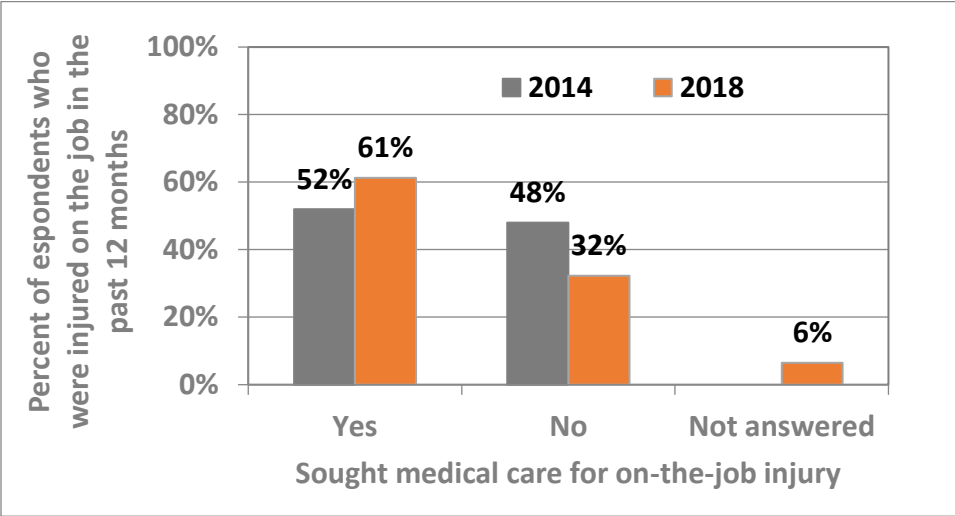
Figure B42: Percentage of employed persons who sought medical care for an on-the-job injury, 2014 vs 2018 survey

Section VIII Qualitative Ranking of Community Health Issues

The top medical condition of concern for the community was mental health (44% of respondents), followed closely by obesity (31%), diabetes (31%), and alcoholism (28%) (Table B23). Other health issues scoring high were cancer (23%), health problems related to aging (18%), heart disease (16%), and child abuse/neglect (12%).

Table B23: What are the three biggest health issues affecting the community?

Category	Count	Percent	Rank
Mental health issues	1,005	43.9%	1
Obesity	711	31.0%	2
Diabetes	708	30.9%	3
Alcoholism	641	28.0%	4
Cancer	527	23.0%	5
Health problems associated with aging	416	18.2%	6
Heart disease	376	16.4%	7
Child abuse and neglect	285	12.4%	8
Dental problems	252	11.0%	9
Respiratory illnesses/lung disease/asthma	222	9.7%	10
Infectious diseases	139	6.1%	11
Sexually transmitted diseases	137	6.0%	12
Sexual abuse	132	5.8%	13
Teenage pregnancy	124	5.4%	14
Other	192	8.4%	15
Motor vehicle/bicycle accidents	93	4.1%	16
Homicide	73	3.2%	17
Stroke	77	3.4%	18
Poor birth outcomes	34	1.5%	19
Total Surveys	2,291	100%	

The top-ranked individual behaviors affecting community health selected by respondents were drug and alcohol abuse, poor nutrition/eating habits, and life stress – all denoted by about one-third of respondents (Table B24). Other high-scoring individual health behaviors that can affect community health included lack of exercise (28%), not receiving regular health checkups (19%), smoking (15%) and crime/violence (14%).

Table B24: What are the top three individual behaviors that affect health in the community?

Individual Health Behavior	Count	Percent	Rank
Alcohol abuse	790	34.5%	1
Drug abuse	789	34.4%	2
Poor nutrition/eating habits	767	33.5%	3
Life stress/lack of coping skills	748	32.6%	4
Lack of exercise	643	28.1%	5
Not getting regular check-ups by a healthcare provider	433	18.9%	6
Smoking/tobacco use	345	15.1%	7
Crime/violence	315	13.7%	8
Driving while drunk/on drugs	249	10.9%	9
Distracted driving	237	10.3%	10
Domestic or intimate partner violence	195	8.5%	11
Unsafe sex	133	5.8%	12
Suicide	109	4.8%	13
Not getting "shots" (vaccines) to prevent disease	108	4.7%	14
Other	95	4.1%	15
Using weapons/guns	91	4.0%	16
Teenage sex	79	3.4%	17
Total Surveys	2,291	100%	

The top socioeconomic circumstances capable of affecting community health selected by respondents included homelessness and lack of health insurance (both at 44%) (Table B25). Other high-scoring socioeconomic factors included poverty (39%), lack of education (24%), and unemployment (22%).

Table B25: What are the top three social and economic circumstances that affect health in the community?

Social/Economic Circumstance	Count	Percent	Rank
Homelessness	1,017	44%	1
No health insurance	1,011	44%	2
Poverty	897	39%	3
Lack of education/no high school education	558	24%	4
Unemployment	506	22%	5
Not enough food (food insecurity)	405	18%	6
Cultural barriers	402	18%	7
Language barriers	372	16%	8
Racism and discrimination	361	16%	9
Single parenting	256	11%	10
Other	111	5%	11
Total Surveys	2,291	100%	

The highest-ranking environmental issues that can affect community health selected by respondents included cigarette smoke (31%) and heat/hot days (29%) (Table B26). Other high-scoring environmental issues selected by about 1 in 4 respondents included lack of access to healthy foods (27%), air pollution (27%), and poor housing conditions (26%).

Table B26: What are the top three environmental issues that affect health in the community?

Environmental Issue	Percent	Percent	Rank
Cigarette smoke	712	31.1%	1
Heat/hot days	652	28.5%	2
Lack of access to healthy foods	622	27.1%	3
Air pollution	607	26.5%	4
Poor housing conditions	597	26.1%	5
Pesticide use	379	16.5%	6
Lack of access to places for physical activity	348	15.2%	7
Lack of public transportation	310	13.5%	8
Contaminated drinking water	314	13.7%	9
Trash on streets & sidewalks	300	13.1%	10
Lack of safe walkways and bikeways	275	12.0%	11
Traffic	273	11.9%	12
Poor neighborhood design	202	8.8%	13
Other	108	4.7%	14
Flood/drainage problems	71	3.1%	15
Total Surveys	2,291	100%	

The top-scoring factors important to community health selected by respondents included access to healthcare (49%) and affordable housing (42%) (Table B27). Other high-scoring factors were access to healthy food (29%), job opportunities (24%), low crime/safe neighborhoods (19%) and access to childcare (17%).

Table B27: What are the three most important factors of a healthy community?

Factors of a Healthy Community	Count	Percent	Rank
Access to healthcare	1,120	49%	1
Affordable housing	964	42%	2
Access to healthy food	659	29%	3
Job opportunities	548	24%	4
Low crime/safe neighborhoods	432	19%	5
Access to childcare	386	17%	6
Good schools	375	16%	7
Safe place to raise kids	304	13%	8
Well-informed community about health issues	278	12%	9
Community involvement	258	11%	10
Air quality	257	11%	11
Elderly care	236	10%	12
Support agencies	215	9%	13
Green/ open spaces	199	9%	14
Tolerance for diversity	196	9%	15
Time for family	176	8%	16
Parks and recreation facilities	166	7%	17
Other	56	2%	18
Total Surveys	2,291	100%	

Table B28 summarizes the top five responses countywide for each of the questions about the factors affecting community health. Themes emerging from these questions demonstrate that mental health, alcohol/substance abuse, chronic disease (obesity/diabetes), homelessness, poverty, environmental cigarette smoke, quality and affordable housing, and access to healthcare/health insurance/healthy food are important aspects of community health in Yolo County.

Table B28: The top five responses for each question about the factors affecting health in the community

Rank	Community Health Issues	Individual Health Behaviors	Social & Economic Circumstances	Environmental Issues	Factors of a Healthy Community
1	Mental health issues 44% (1,005)	Alcohol abuse 34% (790)	Homelessness 44% (1,017)	Cigarette smoke 31% (712)	Access to healthcare 49% (1,120)
2	Obesity 31% (711)	Drug Abuse 34% (789)	No health insurance 44% (1,011)	Heat/hot days 28% (652)	Affordable Housing 42% (964)
3	Diabetes 31% (708)	Poor nutrition/eating habits 34% (767)	Poverty 39% (897)	Lack of access to healthy foods 27% (622)	Access to healthy food 29% (659)
4	Alcoholism 28% (641)	Life stress/lack of coping skills 33% (748)	Lack of education/no high school education 25% (558)	Air pollution 26% (607)	Job opportunities 24% (548)
5	Cancer 23% (527)	Lack of exercise 28% (643)	Unemployment 22% (506)	Poor housing conditions 26% (597)	Low crime/safe neighborhoods 19% (432)

Twenty-five to 48% of respondents in all regions cited mental health as a priority issue (Table B29). However, only 12% of survey respondents reported a mental health diagnosis. Clearly, respondents believed that poor mental health affects the family and community in various ways. Obesity was much more prevalent among repondents (at 21%), and it was also cited as a top health concern by 25% to 44% of respondents across regions. Other top health concerns were diabetes (28% to 50% across regions) and alcoholism (26% to 56% across regions), ranked first in the South East (Clarksburg).

Table B29: The top-ranked health issues affecting the community by region

Rank	Central	East	North East	North West	South	South East	South West
	n=566	n=752	n=194	n=96	n=516	n=16	n=137
1	Mental health issues 48% (271)	Mental health issues 39% (292)	Mental health issues 41% (79)	Obesity (tied #1) 44% (42)	Mental health issues 54% (280)	Alcoholism 56% (9)	Diabetes 46% (63)
2	Obesity 33% (184)	Alcoholism 34% (253)	Diabetes 38% (73)	Diabetes (tied #1) 44% (42)	Obesity 33% (170)	Diabetes (tied #2) 50% (8)	Obesity 35% (48)
3	Diabetes 28% (158)	Diabetes 29% (215)	Alcoholism 31% (61)	Mental health issues 36% (35)	Diabetes 28% (143)	Obesity (tied #2) 50% (8)	Cancer 31% (42)
4	Alcoholism 26% (145)	Obesity (tied for fourth) 27% (205)	Obesity 26% (51)	Alcoholism 31% (30)	Health problems assoc. with aging 24% (126)	Mental health issues 25% (4)	Mental health issues (tied #4) 28% (39)
5	Cancer 18% (104)	Cancer (tied for fourth) 27% (204)	Cancer 25% (48)	Cancer 24% (23)	Heart disease 21% (108)	Heart disease (tied #5) 19% (3)	Alcoholism (tied #4) 28% (38)

Continued on next page

Rank	Central	East	North East	North West	South	South East	South West
	n=566	n=752	n=194	n=96	n=516	n=16	n=137
5						Respiratory illnesses/lung disease/asthma (tied #5) 19% (3)	
5						Teenage pregnancy (tied #5) 19% (3)	

There was more regional variation among responses about individual behaviors affecting community health (Table B30). Drug and alcohol abuse ranked highest in Central, East and North East regions (drug 38% to 40%; alcohol 32% to 42%), but lower in the remaining regions. Life stress ranked highest in the South and South East (45% to 56%). Poor nutrition was identified by 33% to 43% of respondents across regions, and lack of exercise featured as an important individual behavior, identified by 31% to 40% of respondents in 5 of the 7 regions.

Table B30: The top-ranked individual behaviors that affect health in the community by region

Rank	Central	East	North East	North West	South	South East	South West
	n=566	n=752	n=194	n=96	n=516	n=16	n=137
1	Drug abuse 38% (217)	Alcohol abuse 42% (319)	Drug abuse 38% (74)	Lack of exercise (tied #1) 40% (38)	Life stress/lack of coping skills 45% (231)	Life stress/lack of coping skills 56% (9)	Poor nutrition/eating habits 39% (53)
2	Poor nutrition/eating habits 33% (187)	Drug abuse 40% (301)	Poor nutrition/eating habits 34% (65)	Poor nutrition/eating habits (tied #1) 40% (38)	Poor nutrition/eating habits 43% (222)	Alcohol abuse 44% (7)	Life stress/lack of coping skills 34% (47)
3	Alcohol abuse 32% (179)	Life stress/lack of coping skills 26% (198)	Lack of exercise 32% (63)	Alcohol Abuse 33% (32)	Lack of exercise 36% (187)	Lack of exercise (tied #3) 31% (5)	Alcohol abuse 33% (45)
4	Life stress/lack of coping skills 31% (177)	Poor nutrition/eating habits 26% (193)	Alcohol abuse 32% (62)	Life stress/lack of coping skills 29% (28)	Alcohol abuse 27% (141)	Poor nutrition/ eating habits (tied #3) 31% (5)	Lack of exercise 31% (42)

Rank	Central	East	North East	North West	South	South East	South West
	n=566	n=752	n=194	n=96	n=516	n=16	n=137
5	Lack of exercise 26% (145)	Lack of exercise 21% (159)	Life stress/lack of coping skills 28% (55)	Drug abuse 25% (24)	Drug abuse 25% (128)	Drug abuse (tied #5) 25% (4)	Drug abuse 26% (35)
5						Crime/violence (tied #5) 25% (4)	
5						Distracted driving (tied #5) 25% (4)	

Homelessness was identified by 40% to 50% of respondents in the Central, East, North East and South regions as a socioeconomic issue affecting community health (Table B31). Other socioeconomic issues included lack of health insurance, ranging from 39% to 55% across regions; as well as poverty (32% to 41% across regions). Lack of education ranged from 22% to 44% across regions (highest in the South East), and unemployment was listed by by at least 1 in 4 respondents in 5 of the 7 regions.

Table B31: The top-ranked social and economic circumstances that affect health in the community by region

Rank	Central	East	North East	North West	South	South East	South West
	n=566	n=752	n=194	n=96	n=516	n=16	n=137
1	Homelessness 50% (284)	Homelessness 50% (378)	No health insurance 42% (82)	No health insurance 55% (53)	No health insurance 51% (264)	Racism and discrimination 50% (8)	No health insurance 50% (68)
2	Poverty 41% (231)	No health insurance 42% (313)	Homelessness 40% (78)	Poverty 32% (31)	Poverty 46% (239)	No health insurance (tied #2) 44% (7)	Poverty 35% (48)
3	No health insurance 39% (221)	Poverty 36% (267)	Poverty 39% (75)	Homelessness 25% (24)	Homelessness 40% (205)	Lack of education/no high school education (tied #2) 44% (7)	Lack of education/no high school education 29% (40)
4	Unemployment 24% (136)	Lack of education/no high school education 25% (187)	Lack of education/no high school education 27% (53)	Lack of education/no high school education (tied #4) 24% (23)	Lack of education/no high school education 22% (112)	Unemployment (tied #4) 38% (6)	Homelessness 27% (37)
5	Lack of education/no high school education 23% (129)	Unemployment 23% (174)	Unemployment 23% (45)	Unemployment (tied #4) 24% (23)	Cultural barriers 21% (107)	Language barriers (tied #4) 38% (6)	Language barriers 27% (37)

Cigarette smoke was the top-ranked environmental issue in 6 of Yolo County's 7 regions (Table B32). Other high-scoring environmental issues were poor housing conditions (about 1 in 3 respondents in Central and North East regions) and heat/hot days (about 1 in 4 respondents in all regions and the top environmental concern in the South). Lack of access to healthy foods was alos listed by about 1 in 4 respondents in 6 of Yolo County's 7 regions. Pesticide use was notably of greater concern in the rural North West (Capay Valley) and South East (Clarksburg).

Table B32: The top-ranked environmental issues that affect health in the community by region

Rank	Central	East	North East	North West	South	South East	South West
	n=566	n=752	n=194	n=96	n=516	n=16	n=137
1	Cigarette smoke (tied #1) 29% (166)	Cigarette smoke 36% (270)	Cigarette smoke 35% (68)	Cigarette smoke 31% (30)	Heat/hot days 35% (179)	Cigarette smoke 69% (11)	Cigarette smoke 37% (51)
2	Poor housing conditions (tied #1) 29% (162)	Air pollution (tied #2) 28% (212)	Poor housing conditions 31% (61)	Pesticide use 29% (28)	Air pollution 31% (161)	Pesticide use 44% (7)	Lack of access to healthy foods 29% (40)
3	Lack of access to healthy foods 27% (155)	Poor housing conditions (tied #2) 28% (207)	Heat/hot days 28% (54)	Heat/hot days 26% (25)	Lack of access to healthy foods 28% (144)	Trash on streets & sidewalks (tied #3) 38% (6)	Heat/hot days 27% (37)
4	Heat/hot days 26% (147)	Lack of access to healthy foods (tied #2) 27% (206)	Lack of access to healthy foods 27% (52)	Lack of access to healthy foods 22% (21)	Poor housing conditions 25% (127)	Air pollution (tied #3) 38% (6)	Lack of access to places for physical activity 25% (34)
5	Air pollution 23% (132)	Heat/hot days 27% (203)	Air pollution 24% (46)	Air pollution 18% (17)	Cigarette smoke 22% (114)	Heat/hot days 31% (5)	Air pollution 22% (30)

Access to healthcare was the top factor of a healthy community selected by respondents, ranging from 42% to 55% across regions (Table B33). It was followed closely by affordable housing (38% to 44% across regions). Access to healthy food was also ranked third in 6 of the 7 regions, ranging from 21% to 38%, and job opportunities was ranked fourth in 4 of the 7 regions, cited by about 1 in 4 respondents.

Table B33: The top-ranked factors of a healthy community by region

Rank	Central	East	North East	North West	South	South East	South West
	n=566	n=752	n=194	n=96	n=516	n=16	n=137
1	Access to healthcare 49% (279)	Access to healthcare 44% (333)	Access to healthcare 48% (94)	Access to healthcare 42% (40)	Access to healthcare 55% (283)	Access to healthcare 50% (8)	Access to healthcare 55% (76)
2	Affordable housing 45% (256)	Affordable housing 40% (301)	Affordable housing 42% (82)	Affordable housing 38% (36)	Affordable housing 44% (227)	Low crime/safe neighborhoods 44% (7)	Affordable housing 39% (53)
3	Job opportunities 28% (160)	Access to healthy food 26% (196)	Access to healthy food 32% (63)	Access to healthy food 21% (20)	Access to healthy food 35% (179)	Access to healthy food 38% (6)	Access to healthy food 31% (43)
4	Access to healthy food 26% (148)	Job opportunities 24% (183)	Job opportunities 25% (48)	Job opportunities 17% (16)	Job opportunities 21% (106)	Green/open spaces 31% (5)	Access to childcare 22% (30)
5	Low crime/safe neighborhoods (tied #5) 19% (105)	Low crime/safe neighborhoods 21% (161)	Good schools 22% (42)	Low crime/safe neighborhoods (tied #5) 16% (15)	Low crime/safe neighborhoods 16% (81)	Job opportunities 25% (4)	Low crime/safe neighborhoods 18% (25)
5				Good schools (tied #5) 16% (15)			

Section IX Changes to Qualitative Rankings of Community Health Issues between the 2018 Health Status Survey and the 2013 Community Themes and Strengths Assessment

A higher percentage of respondents in 2018 were concerned about mental health issues (44% vs. 32% in 2013) than obesity in 2018, although obesity remained a top concern with 31% of responses. Alcoholism was ranked higher in 2018 as well at 28% of responses, although a similar percentage of respondents selected it in 2013 (25%). Health problems associated with aging (selected by 18% of 2018 respondents) did not rank in the top 5 in the current survey, even though a high proportion of 2018 respondents were aged 55+.

Among individual health behaviors that most affect community health, the 5 top-ranked individual behaviors were the same, although the rankings differed. Substance use issues (alcohol and drug abuse) ranked highest in the 2018 survey, whereas in 2013 health behaviors relating to nutrition and exercise ranked highest. Taken in tandem, these rankings suggest that mental health and the closely-related issue of substance use figure prominently in the minds of community members.

Table B34: Health issues and individual health behaviors with the most impact on community health, 2013 vs. 2018 survey

Rank	Community Health Issues		Individual Health Behaviors	
	2018 (n=2,291)	2013 (n=900)	2018 (n=2,291)	2013 (n=900)
1	Mental health issues 44% (1,005)	Obesity 42% (375)	Alcohol abuse 34% (790)	Poor nutrition/eating habits 45% (405)
2	Obesity 31% (711)	Mental health issues 32% (287)	Drug abuse 34% (789)	Lack of exercise 39% (355)
3	Diabetes 31% (708)	Diabetes 30% (272)	Poor nutrition/eating habits 34% (767)	Alcohol abuse 35% (317)
4	Alcoholism 28% (641)	Health problems assoc'd w/aging 28% (254)	Life stress/lack of coping skills 33% (748)	Drug abuse 26% (238)
5	Cancer 23% (527)	Cancer 27% (244)	Lack of exercise 28% (643)	Life stress/lack of coping skills 26% (236)

Among social and economic circumstances impacting community health, homelessness was ranked higher in 2018 (at 44%) than 2013 (23%), reflecting the community's awareness of rising homelessness rates in the past 2-3 years. Unemployment ranked highest in 2013 at 54%, reflecting the after-effects of the Great Recession of 2008-2009.

Among environmental issues with the most impact on community health, cigarette smoke ranked highest in 2018 with 31% of responses, although the percentage in 2013 was virtually the same (32%). There was greater concern about heat/hot days (28% of responses vs. 18% in 2013). Concern about external environmental pollutants ranked lower in 2018. Air pollution was cited by 26% of respondents in 2018 vs. 39% in 2013, and pesticide use by 17% in 2018 vs. 26% in 2013.

Table B35: Social and economic circumstances and environmental issues with the most impact on community health, 2013 vs. 2018 survey

Social & Economic Circumstances		Environmental Issues	
2018 (n=2,291)	2013 (n=900)	2018 (n=2,291)	2013 (n=900)
Homelessness 44% (1,017)	Unemployment 54% (490)	Cigarette smoke 31% (712)	Air pollution 39% (351)
No health insurance 44% (1,011)	No health insurance 52% (469)	Heat/hot days 28% (652)	Lack of access to healthy foods 32% (289)
Poverty 39% (897)	Poverty 45% (407)	Lack of access to healthy foods 27% (622)	Cigarette smoke 32% (288)
Lack of education/no high school education 25% (558)	Lack of education/no high school education 33% (298)	Air pollution 26% (607)	Pesticide use 26% (238)
Unemployment 22% (506)	Homelessness 23% (208)	Poor housing conditions 26% (597)	Poor housing conditions 24% (216)

For the question about factors of a healthy community, there were also large changes with 49% of 2018 respondents ranking access to healthcare as a top concern compared with 34% in 2013. Affordable housing (which also relates to homelessness) was cited by 42% of 2018 respondents and only 15% in 2013. This ranking most likely reflects the increasing financial burden of housing cost on community members. Access to healthy food also ranked higher in 2018 (at 29%) compared to only 16% in 2013. Its ranking may also reflect the increasing economic stress felt by community members regarding the affordability of healthy food.

Table B36: Factors of a healthy community, 2013 vs. 2018 survey

Factors of a Healthy Community	
2018 (n=2,291)	2013 (n=900)
Access to healthcare 49% (1,120)	Safe place to raise kids 40% (361)
Affordable Housing 42% (964)	Job opportunities 35% (316)
Access to healthy food 29% (659)	Access to healthcare 34% (310)
Job opportunities 24% (548)	Good schools 30% (269)
Low crime/safe neighborhoods 19% (432)	Low crime/safe neighborhoods 17% (154)

HUMAN DEVELOPMENT
INDEX (HDI)
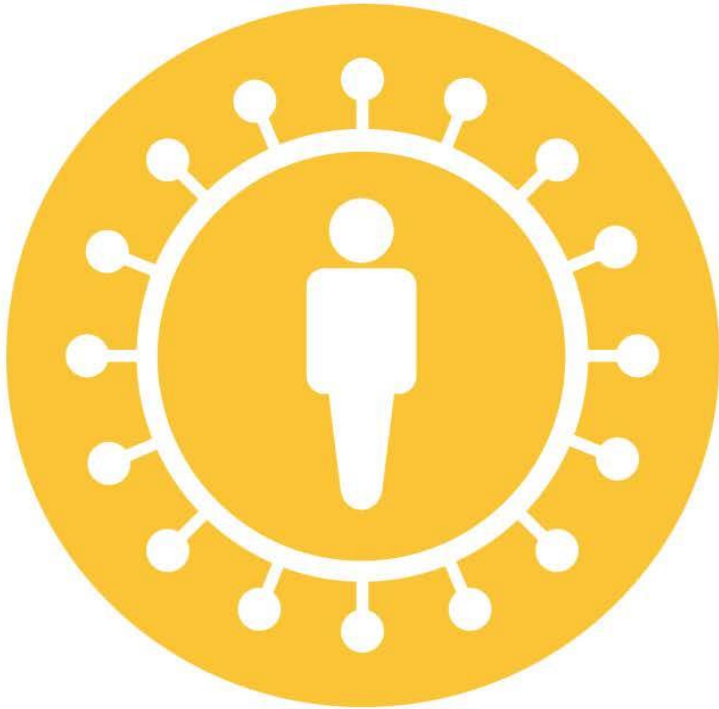
What Determines Our Health?

A PUBLIC HEALTH FRAMEWORK FOR REDUCING HEALTH INEQUITIES
BAY AREA REGIONAL HEALTH INEQUITIES INITIATIVE

How Is HDI It Measured?

physical safety

political participation

sustainable environment

respect of others

digital access

family and community

voice and autonomy

equality before the law

religious freedom

self-expression

THREE DIMENSIONS

A Long and Healthy Life

Access to Knowledge

A Decent Standard of Living

INDICATORS

Life expectancy at birth

Educational degree attainment

School enrollment

Median earnings

Health INDEX + Education INDEX + Income INDEX

3

How Does Yolo County Compare?

UNITED STATES	5.08
California	5.40
Yolo County	**5.49**
White	7.14
Asian	5.49
Hispanic	3.29

1	Marin County	7.45
11	Napa County	5.61
12	San Diego County	5.59
13	Santa Cruz County	5.57
14	Sonoma County	5.53
15	Yolo County	5.49
16	Nevada County	5.32
17	Solano County	5.30
18	San Luis Obispo County	5.28
19	Los Angeles County	5.20
20	Sacramento County	5.19
48	Lake County	3.39

Yolo County Human Development Index

★Rumsey

★Dunnigan

★Guinda

★Zamora

★Knights Landing

★Brooks

★Yolo

★Esparto

★Woodland

West Sacramento

★Davis

★Winters

Clarksburg

Legend

★ Cities & Towns selection

HDI Value

- 1.47 - 1.86
- 1.87 - 4.10
- 4.11 - 5.43
- 5.44 - 6.93
- 6.94 - 8.80
- Floodway Bypass

N

0   3.5   7   14 Miles
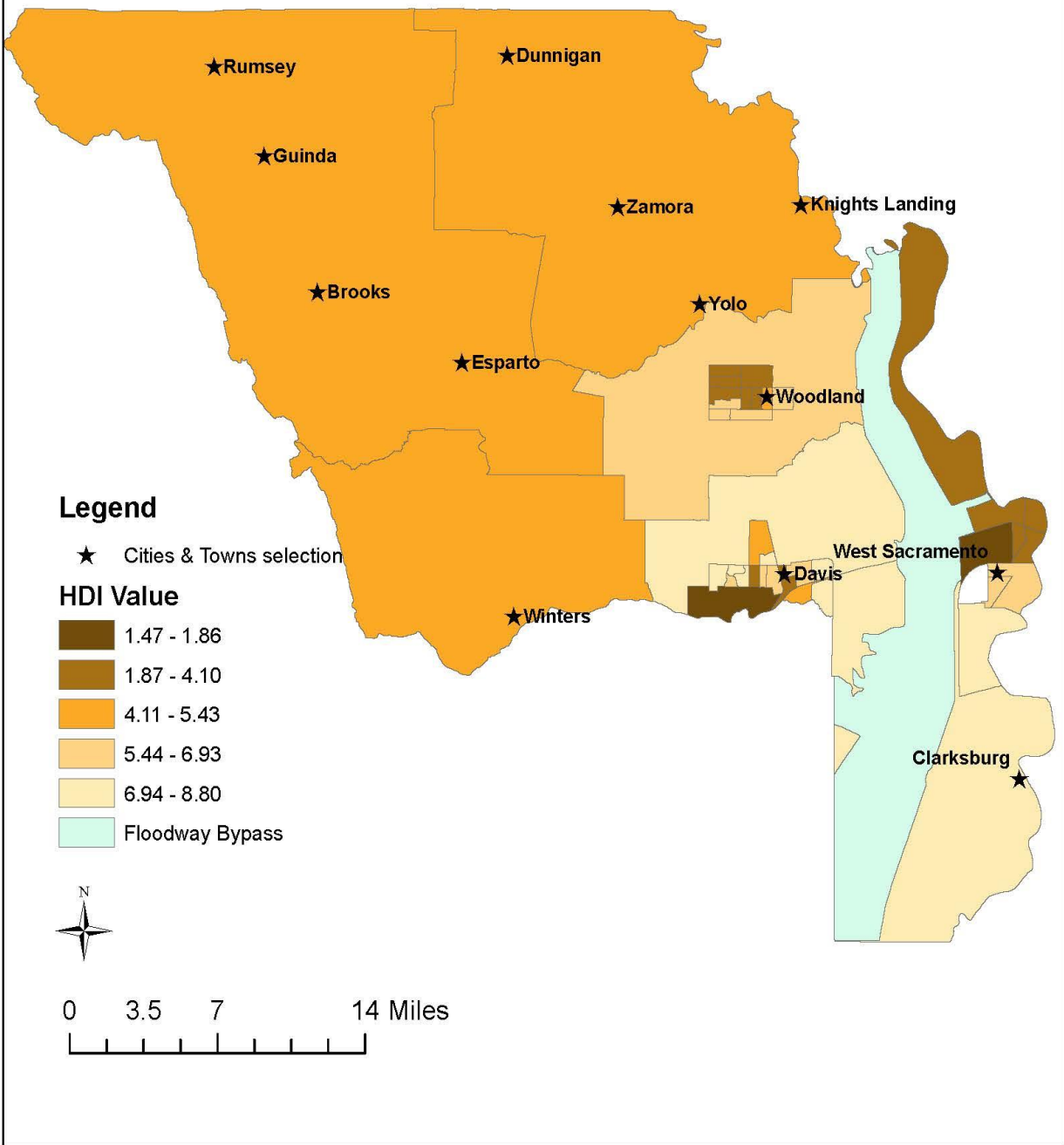
Yolo County HHSA Community Health Branch
02/21/2019 H Dabritz

Human Development Index Davis

Legend

HDI Value

	1.47 - 1.86
	1.87 - 4.10
	4.11 - 5.43
	5.44 - 6.93
	6.94 - 8.80
●	**Cities & Communities**

0   0.45   0.9   1.8 Miles

N
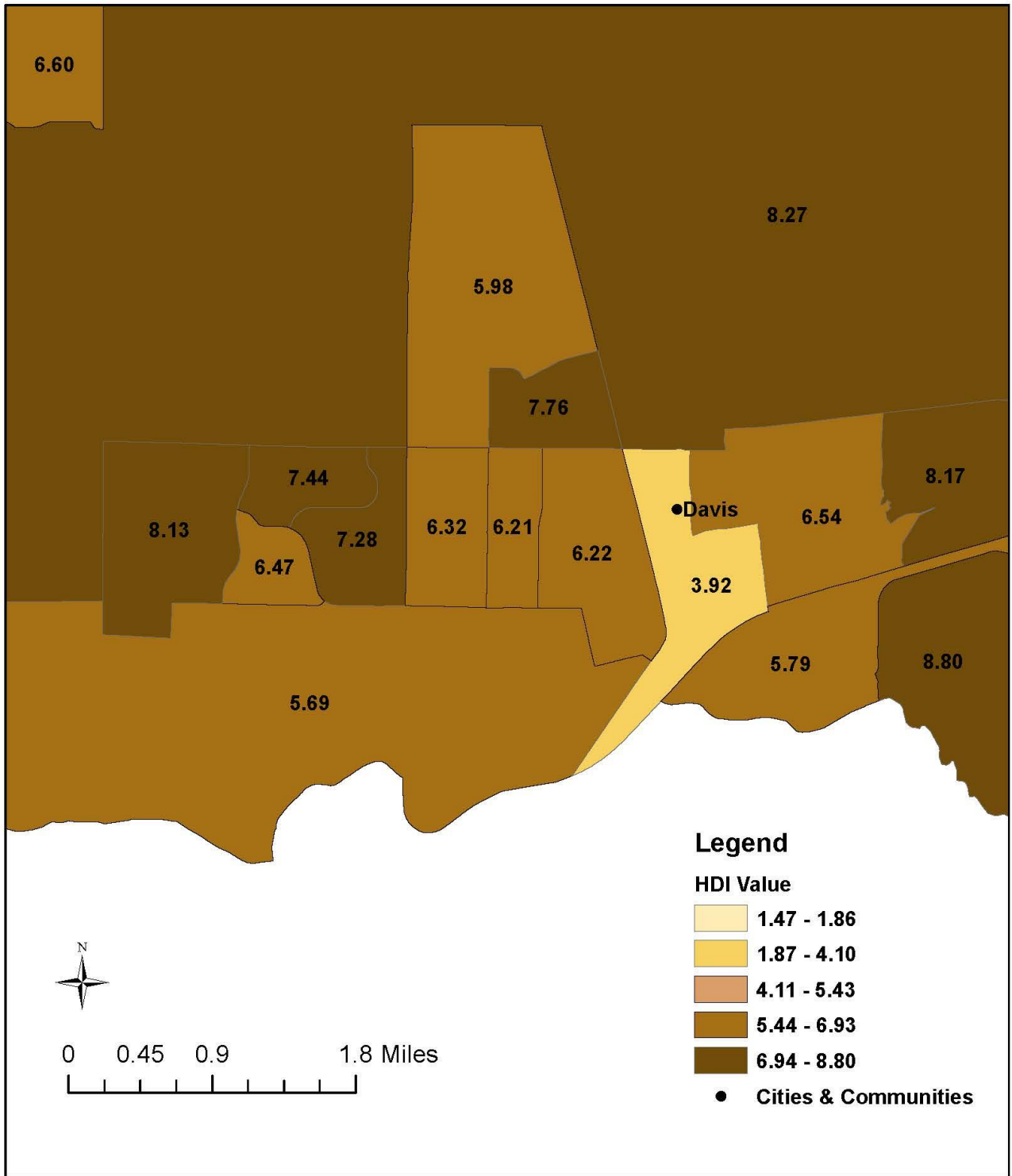
Yolo County HHSA Community Health Branch
5/14/2019 H Dabritz

Human Development Index West Sacramento

Legend

HDI Value
- 1.47 – 1.86
- 1.87 – 4.10
- 4.11 – 5.43
- 5.44 – 6.93
- 6.94 – 8.80
- ● Cities & Communities
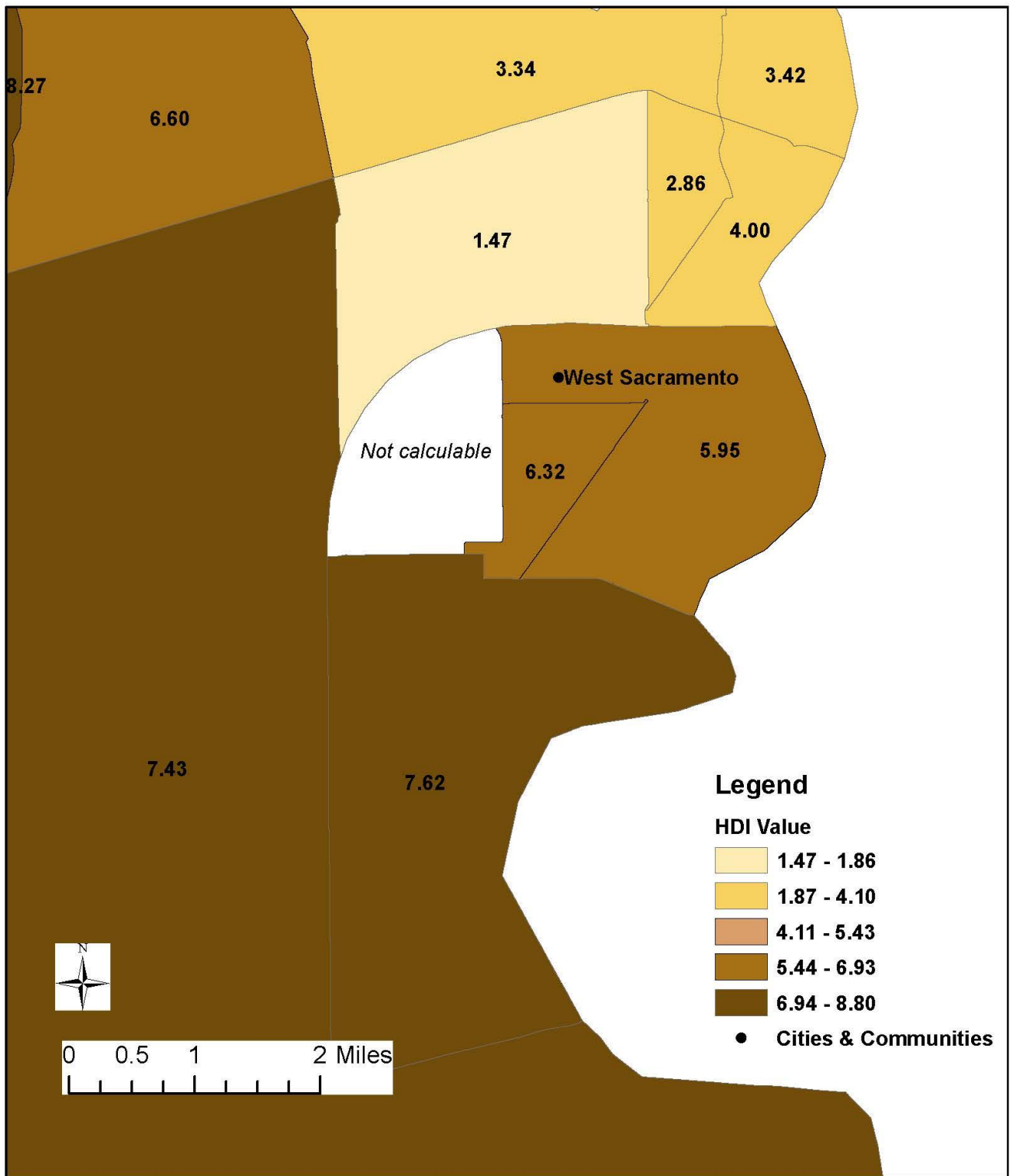
Yolo County HHSA Community Health Branch
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Human Development Index Woodland

4.45

4.10

3.34

3.29

3.48

3.83 3.04 5.10 ●Woodland

6.64

6.93

6.22

6.12

6.60

Legend

HDI Value

1.47 - 1.86

1.87 - 4.10

4.11 - 5.43

5.44 - 6.93

6.94 - 8.80

● **Cities & Communities**

N

0   0.45   0.9   1.8 Miles

8.27
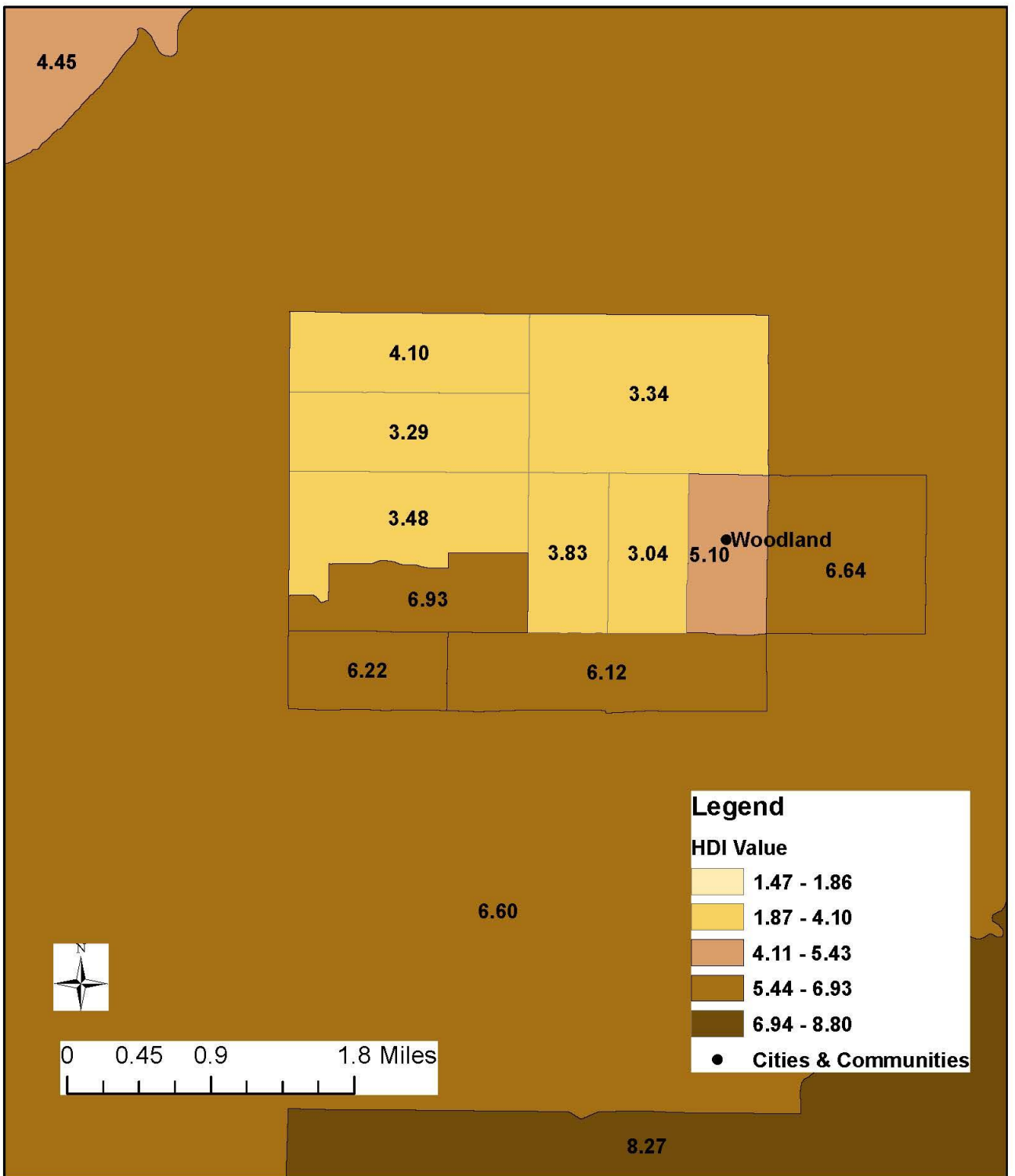
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Health Index

Yolo County Life Expectancy

Rumsey

Dunnigan

Guinda

Zamora

Knights Landing

Brooks

Yolo

Esparto

Woodland

Davis

Winters

Clarksburg

Legend

Life expectancy (years) 2012-2017 data

- 69.2
- 69.3 - 77.8
- 77.9 - 82.1
- 82.2 - 85.0
- 85.1 - 87.8
- Floodway Bypass
- Cities & Communities

N

0   3.5   7   14 Miles
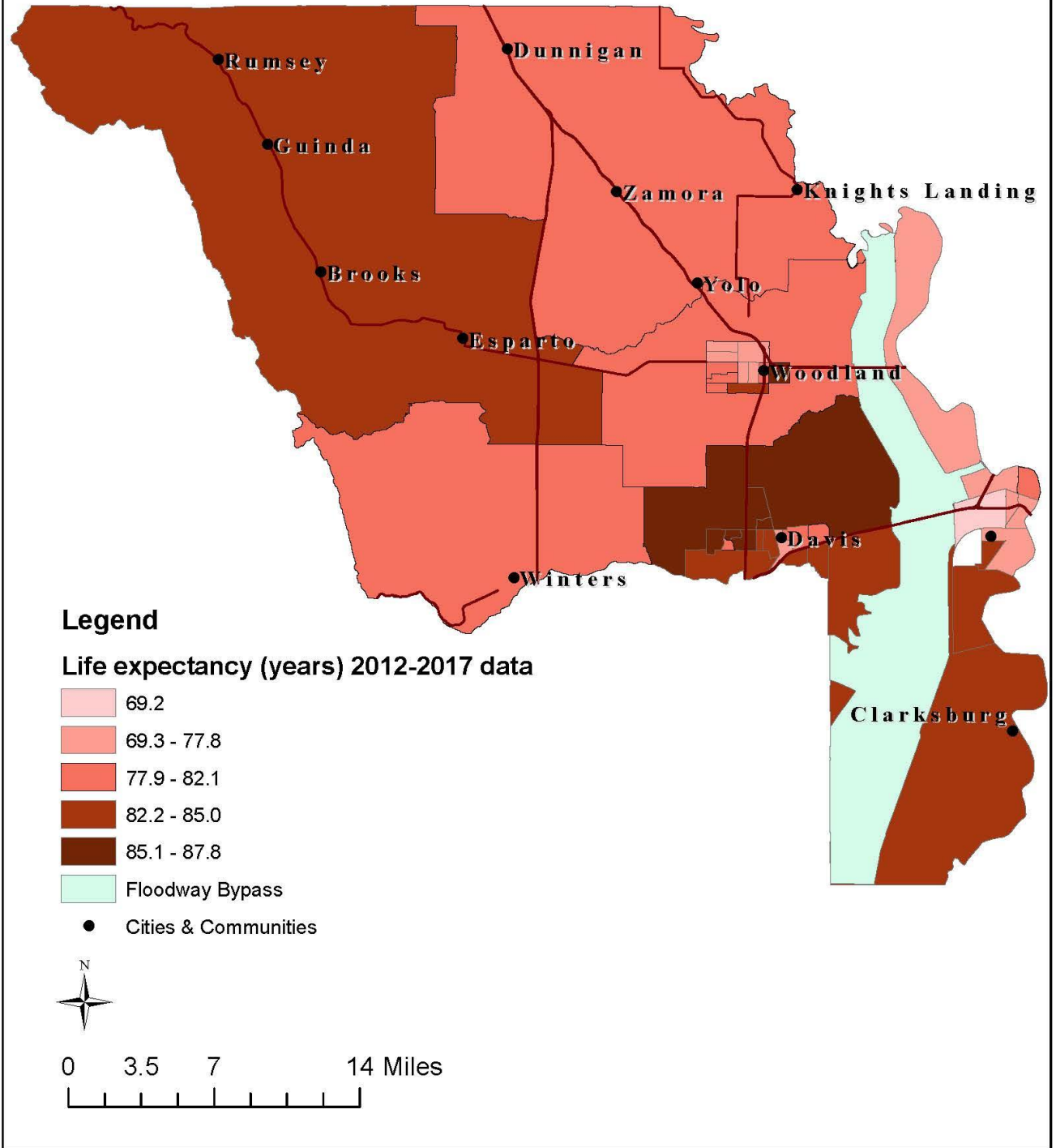
Yolo County HHSA Community Health Branch
02/21/2019 H Dabritz

Education Index

Yolo County Educational Enrollment Index

Legend

Educational Enrollment Index

- 0.0 - 3.3
- 3.4 - 5.0
- 5.1 - 6.9
- 7.0 - 8.7
- 8.8 - 10.0
- Floodway Bypass
- ● Cities & Communities

N

0   3.5   7   14 Miles
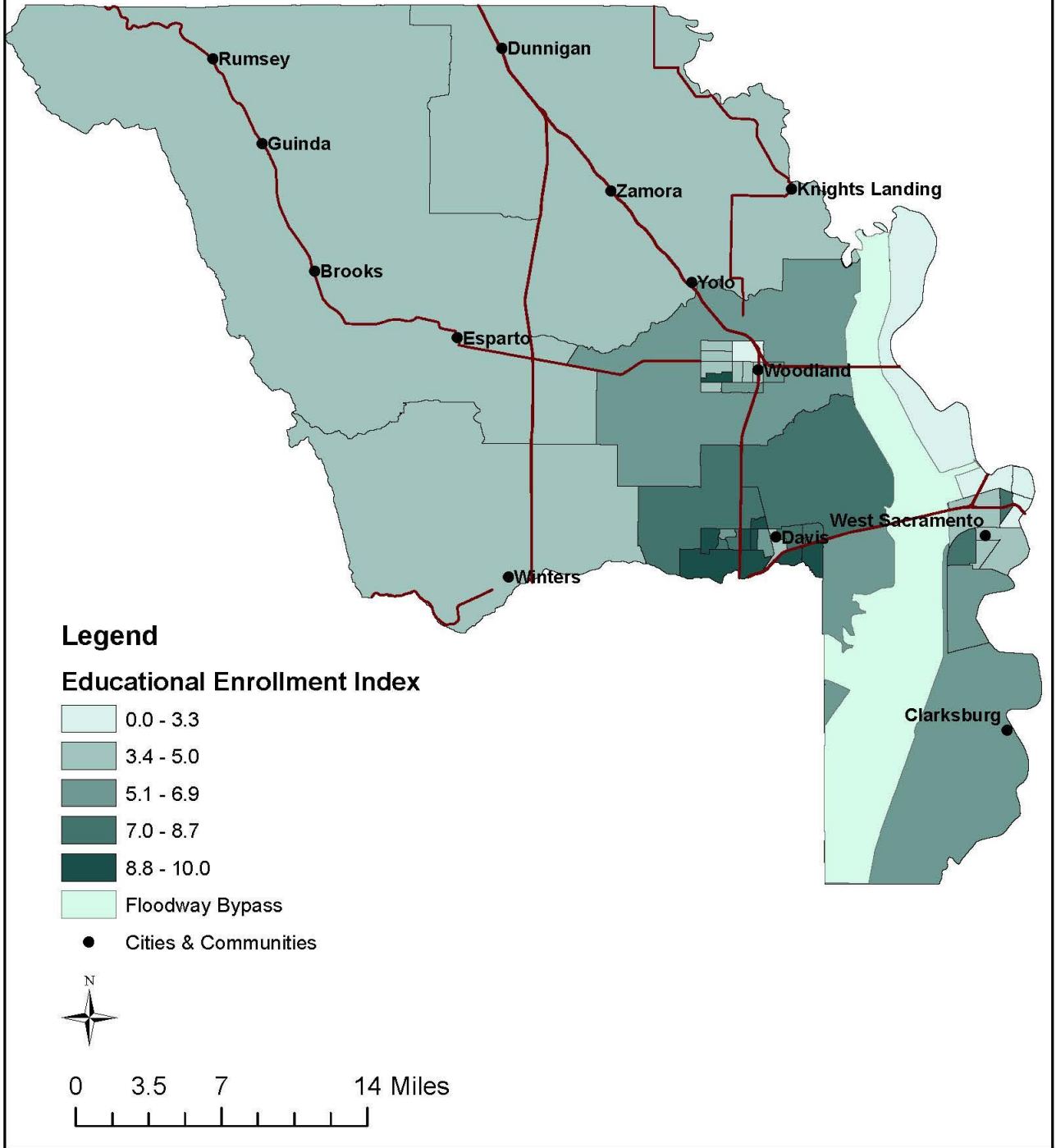
Yolo County HHSA Community Health Branch
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Yolo County Educational Attainment Index

Legend

Educational Enrollment Index

- 1.5 - 3.2
- 3.3 - 4.4
- 4.5 - 5.7
- 5.8 - 7.4
- 7.5 - 10.0
- Floodway Bypass
- • Cities & Communities

N

0   3.5   7   14 Miles

Rumsey

Guinda

Brooks

Esparto

Winters

Dunnigan

Zamora

Knights Landing

Yolo

Woodland

Davis

Clarksburg
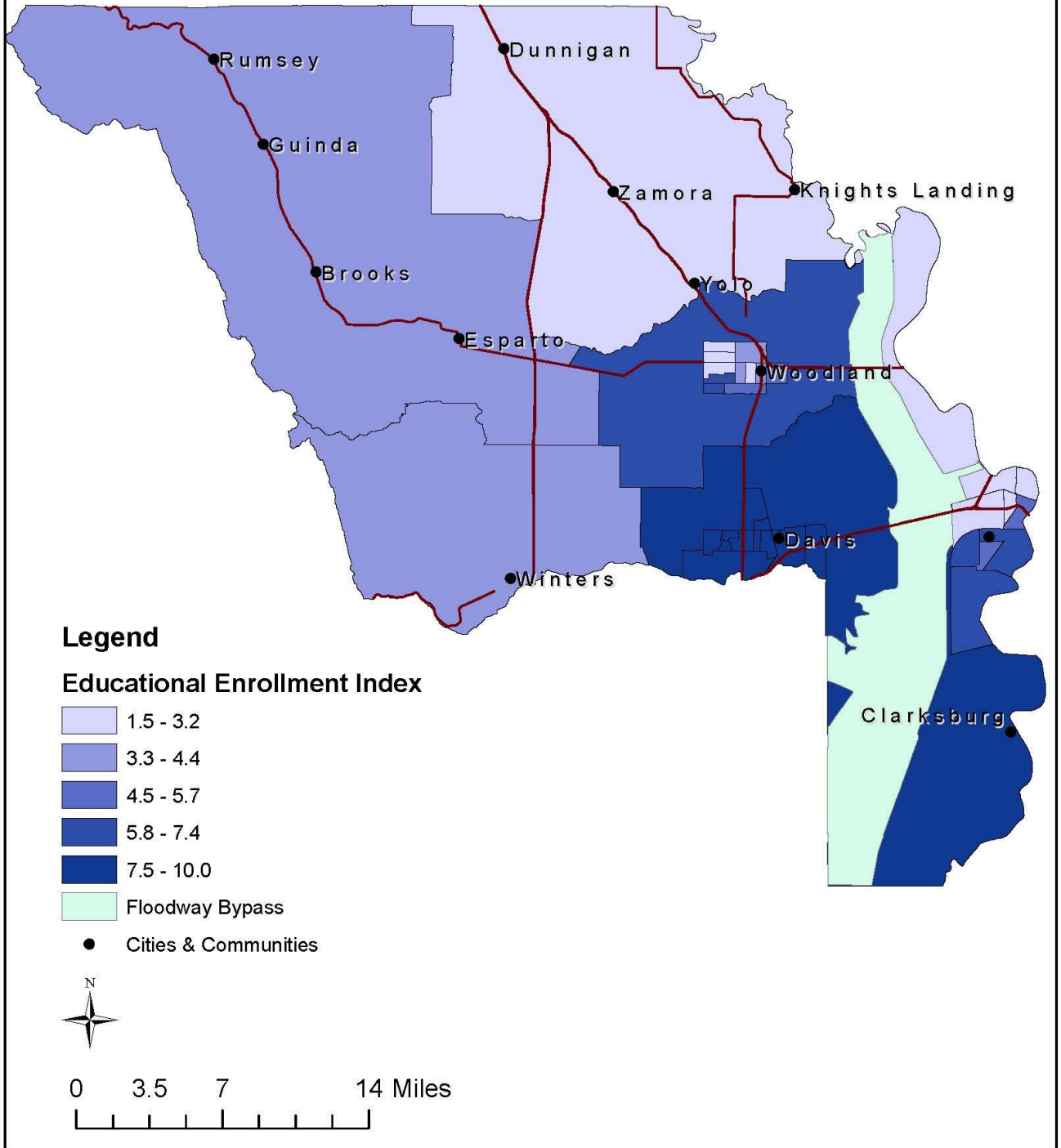
Yolo County HHSA Community Health Branch
02/21/2019 H Dabritz

Yolo County High School Completion

Rumsey

Dunnigan

Guinda

Zamora

Knights Landing

Brooks

Yolo

Esparto

Woodland

Legend

High School Completion
Age 25+

	61.2%
	61.3% - 77.3%
	77.4% - 91.7%
	91.8% - 96.8%
	96.9% - 100.0%
	Floodway Bypass
●	Cities & Communities

West Sacramento

Davis

Winters

Clarksburg

N

0   3.5   7   14 Miles

Data Source:
US Census ACS Table DP02, 2016
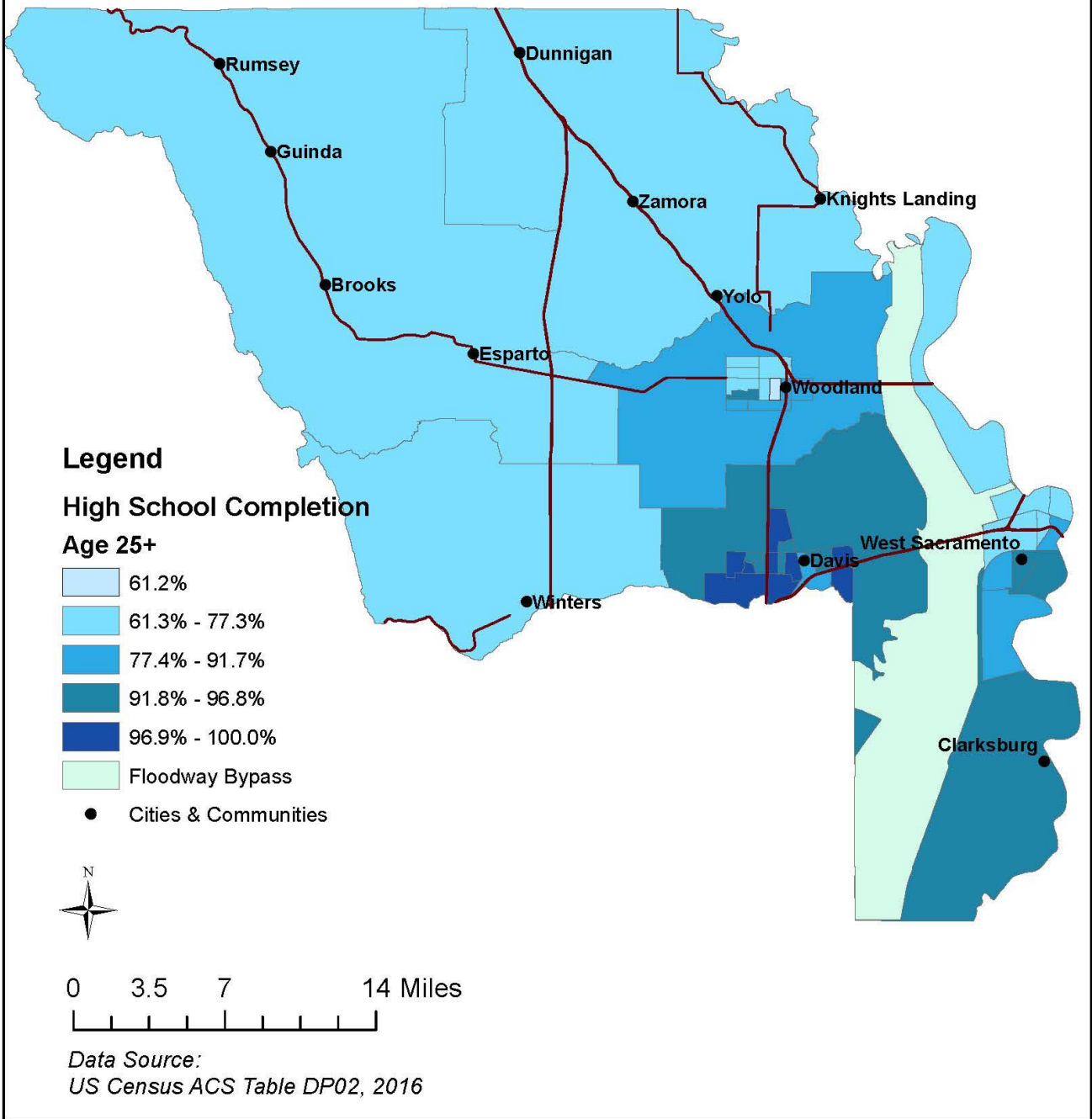
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02/21/2019 H Dabritz

Income Index

Yolo County Median Personal Earnings

Rumsey

Dunnigan

Guinda

Zamora

Knights Landing

Brooks

Yolo

Esparto

Woodland

Legend

Median personal income (US $) Age 16+

	3006 - 10000
	10001 - 25000
	25001 - 35000
	35001 - 45000
	45001 - 60061
	Floodway Bypass
●	Cities & Communities

West Sacramento

Davis

Winters

Clarksburg

N

0   3.5   7   14 Miles

Data Source:
US Census ACS Table S2001, 2016
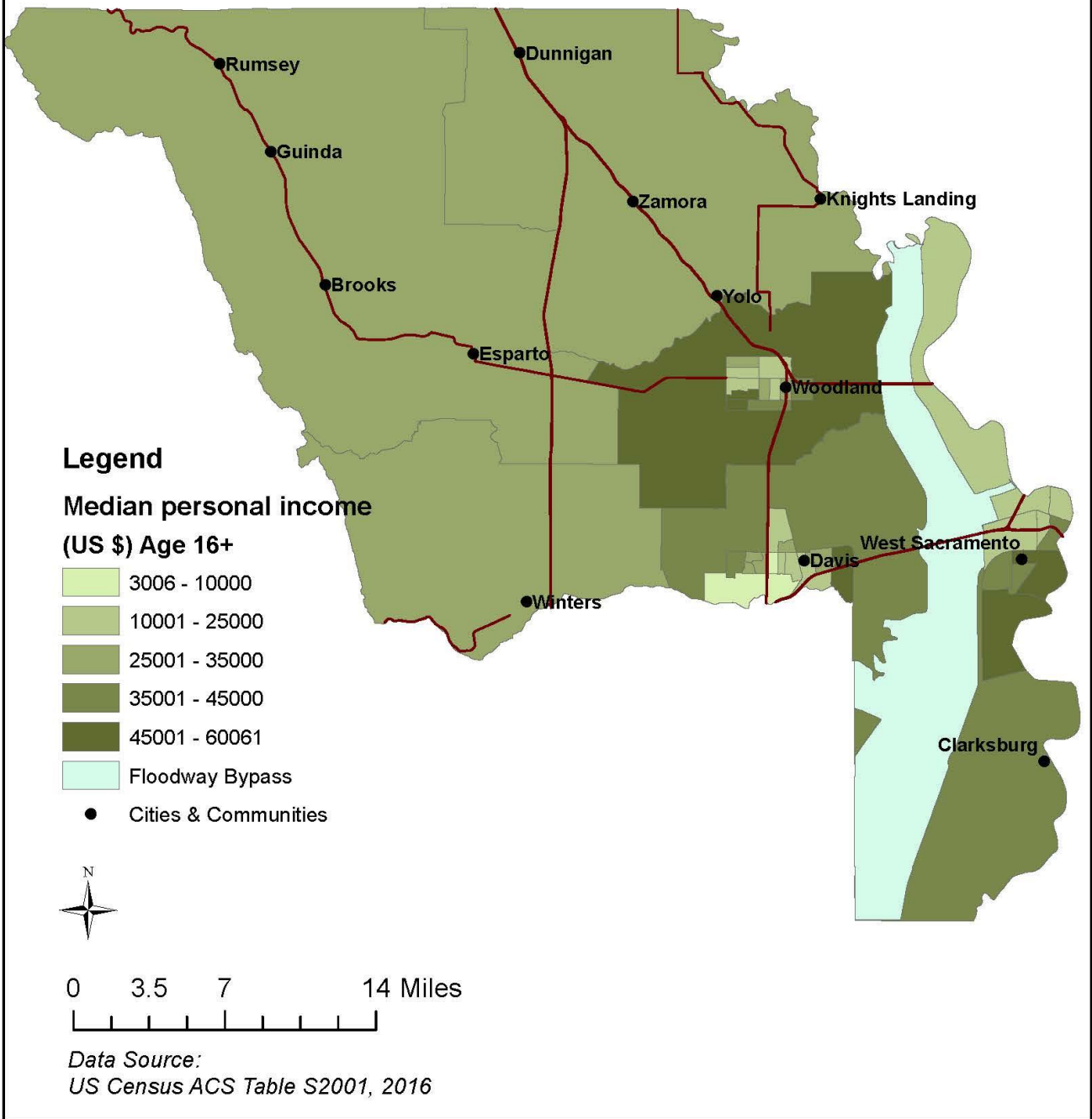
Yolo County HHSA Community Health Branch
02/21/2019 H Dabritz

A TALE OF TWO NEIGHBORHOODS

Southeast Davis
LIFE EXPECTANCY: 83.9 YEARS

West Cap – West Sacramento
LIFE EXPECTANCY: 69.2 YEARS
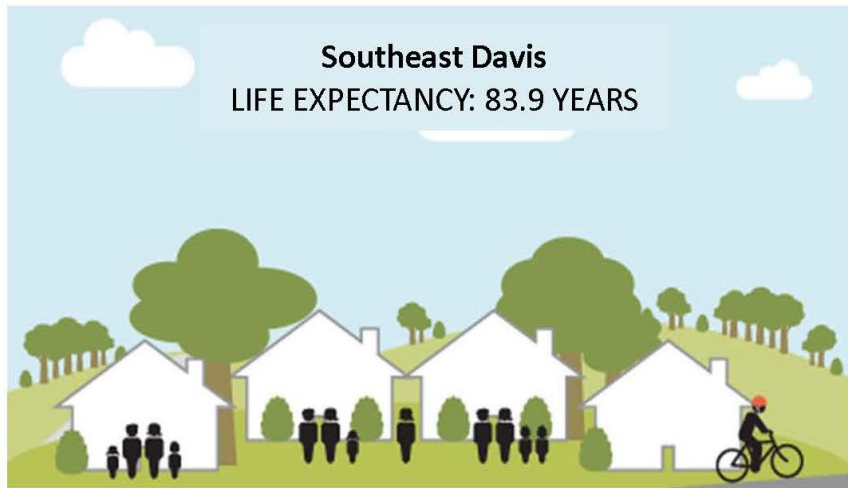
Southeast Davis	West Cap – West Sacramento
• **6.9%** living in poverty	• **38.7%** living in poverty
• **Extensive** parks and green space	• **limited** parks and green space
• **76%** at least bachelor's degree	• **15.3%** at least bachelor's degree
• **$60,061** median personal earnings	• **$18,578** median personal earnings
• **77%** management occupations	• **26%** management occupations
• **64%** housing occupied by owner	• **27%** housing occupied by owner

YOLO COUNTY HUMAN DEVELOPMENT INDEX

Population	Location	HD Index	HEALTH Index	EDUCATION Index	INCOME Index	Life Expectancy [years]	High School Graduate	Bachelor's Degree	Graduate Degree	School Enrollment [3-24 yo]	Median Personal Income
UNITED STATES	UNITED STATES	4.87	4.72	5.15	4.76	78.8	87.0%	30.3%	11.5%	77.3%	$31,334
CALIFORNIA	CALIFORNIA	5.23	5.71	5.15	4.85	80.9	82.1%	32.0%	11.9%	78.6%	$31,736
YOLO COUNTY	YOLO COUNTY	5.32	5.54	6.48	3.92	80.6	85.6%	40.0%	19.5%	83.7%	$27,775
White	White	6.38	5.51	7.76	5.88	80.5	95.3%	50.9%	25.4%	84.7%	$36,843
Asian	Asian	7.37	10.00	9.34	2.78	91.0	89.2%	58.8%	35.9%	95.6%	$23,548
Black	Black	3.98	3.10	6.30	2.53	75.4	89.2%	25.7%	2.7%	94.6%	$22,739
Latino	Latino	5.23	8.95	3.78	2.96	87.8	62.4%	15.5%	6.6%	83.6%	$24,177

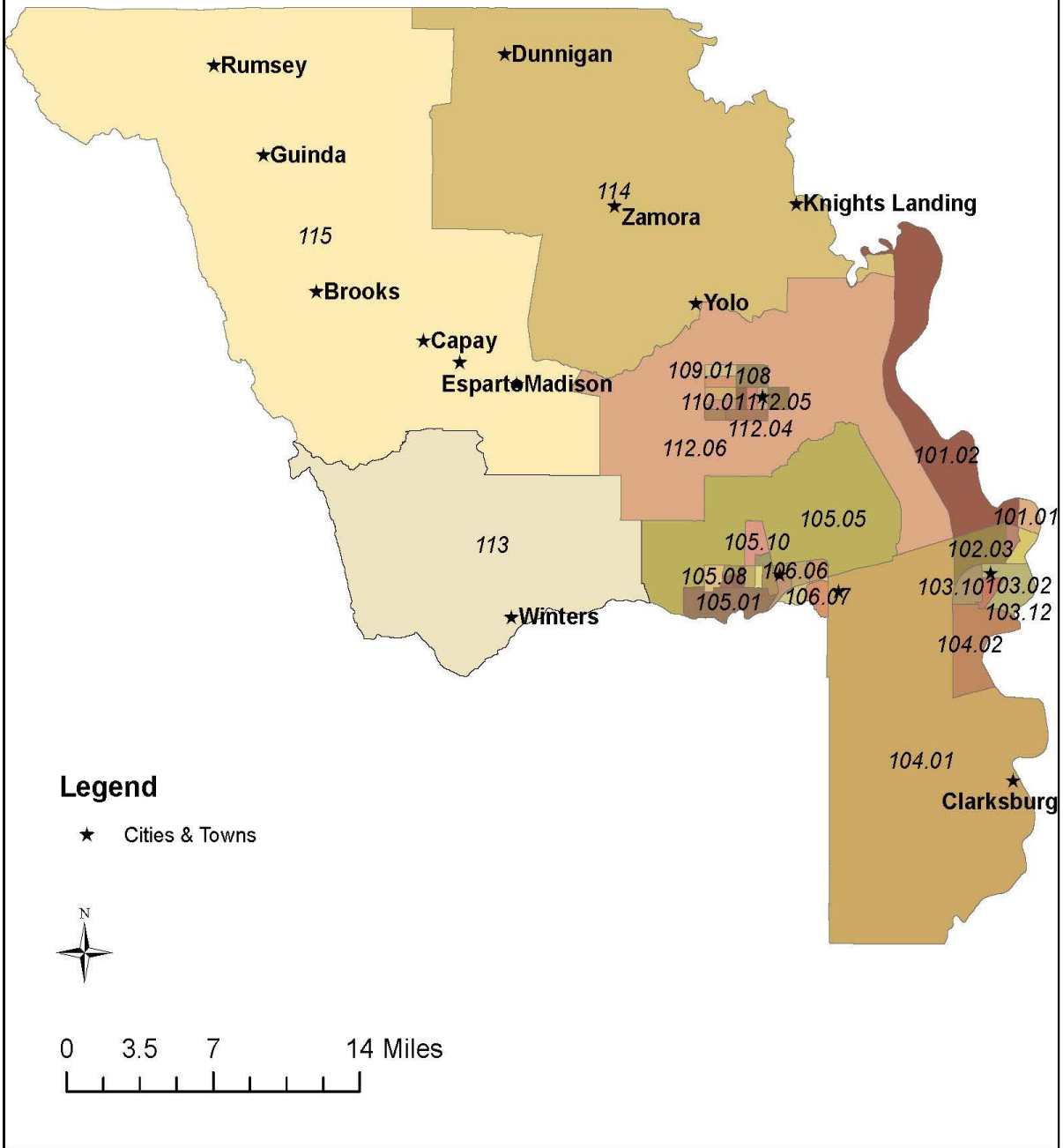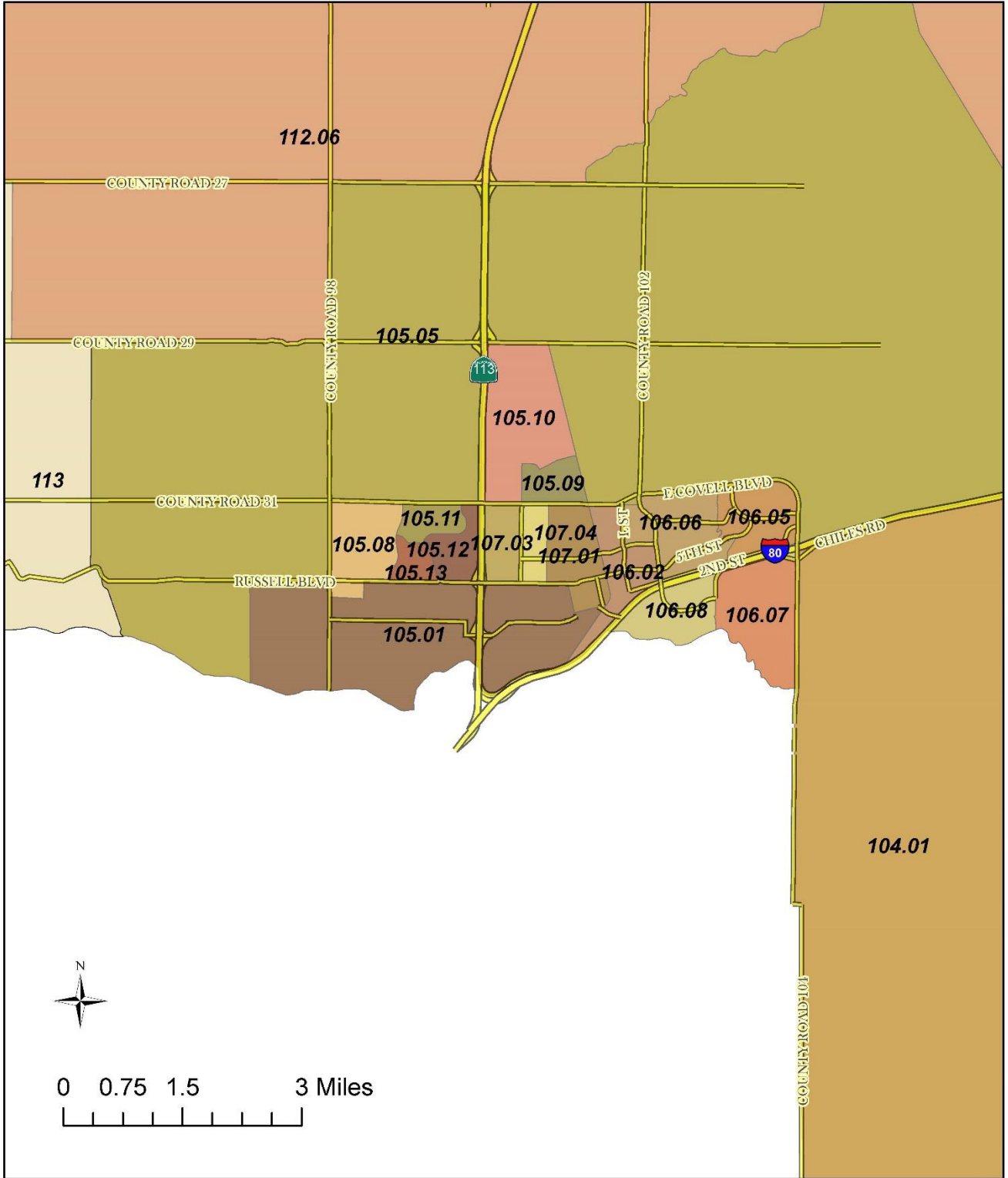| Census Tract	Location	HD Index	HEALTH Index	EDUCATION Index	INCOME Index	Life Expectancy [years]	High School Graduate	Bachelor's Degree	Graduate Degree	School Enrollment [3-24 yo]	Median Personal Income
102.03	WEST SAC	1.47	0.19	3.10	1.13	69.2	71.6%	15.3%	4.0%	73.5%	$18,578
102.04	WEST SAC	2.86	2.81	4.37	1.39	74.8	73.3%	13.2%	3.5%	87.3%	$19,281
111.02	WOODLAND	3.04	3.73	2.62	2.78	76.7	61.2%	8.6%	2.8%	76.9%	$23,560
109.02	WOODLAND	3.29	3.10	3.60	3.17	75.4	76.0%	14.7%	2.5%	77.7%	$24,920
101.02	WEST SAC	3.34	3.78	3.06	3.19	76.8	74.9%	15.0%	4.5%	71.4%	$24,980
108	WOODLAND	3.34	3.97	3.60	2.45	77.2	71.2%	26.1%	11.6%	70.3%	$22,466
101.01	WEST SAC	3.42	4.79	3.06	2.40	79.0	73.7%	16.0%	6.7%	70.4%	$22,290
110.01	WOODLAND	3.48	4.61	3.39	2.44	78.6	72.9%	17.6%	8.2%	72.9%	$22,427
111.01	WOODLAND	3.83	3.77	3.82	3.91	76.8	77.1%	19.3%	7.3%	75.0%	$27,713
106.02	DAVIS	3.92	3.65	7.62	0.49	76.5	91.7%	59.9%	33.4%	77.0%	$16,935
102.01	WEST SAC	4.00	2.60	3.37	6.03	74.3	87.5%	28.5%	9.7%	57.4%	$37,632
109.01	WOODLAND	4.10	4.26	3.61	4.44	77.8	77.3%	15.9%	3.6%	76.1%	$29,934
114	ZAMORA/KNIGHTS LANDING	4.45	4.97	3.52	4.86	79.3	73.8%	14.5%	4.9%	76.8%	$31,818
113	WINTERS	4.69	5.01	4.27	4.78	79.4	75.3%	29.0%	11.2%	74.3%	$31,443
115	ESPARTO-CAPAY VALLEY	5.10	6.79	3.86	4.64	83.2	76.9%	19.6%	8.4%	74.9%	$30,811
111.03	WOODLAND	5.10	6.06	4.39	4.85	81.6	83.5%	21.1%	6.9%	77.4%	$31,753
105.01	DAVIS	5.69	7.08	10.00	0.00	83.8	100.0%	84.0%	44.8%	97.2%	$3,006
105.1	DAVIS	5.71	7.94	9.19	0.00	85.6	97.8%	75.5%	50.6%	86.5%	$11,612
106.08	DAVIS	5.73	7.61	9.59	0.00	84.9	89.5%	62.3%	39.0%	96.7%	$13,487
103.02	WEST SAC	5.95	4.25	5.80	7.81	77.8	94.0%	37.5%	13.4%	76.7%	$48,691
107.01	DAVIS	6.07	7.65	8.80	1.77	85.0	97.3%	72.5%	40.2%	82.4%	$20,363
112.04	WOODLAND	6.12	6.87	5.74	5.76	83.4	85.8%	31.0%	12.0%	83.5%	$36,191
107.04	DAVIS	6.14	6.87	9.80	1.76	83.4	96.6%	70.5%	42.7%	92.9%	$20,344
112.03	WOODLAND	6.22	5.54	5.62	7.49	80.5	90.7%	38.1%	13.8%	75.8%	$46,471
105.13	DAVIS	6.25	5.61	9.33	3.79	80.7	98.6%	81.0%	46.4%	88.0%	$27,274
103.12	WEST SAC	6.32	7.62	5.07	6.26	85.0	95.3%	30.1%	10.4%	73.2%	$38,929
107.03	DAVIS	6.32	8.97	10.00	0.00	87.8	97.1%	74.9%	50.4%	96.8%	$5,872
106.06	DAVIS	6.54	5.49	9.33	4.80	80.4	96.0%	64.9%	33.6%	90.5%	$31,510
112.06	WOODLAND	6.60	5.98	6.13	7.68	81.5	89.2%	33.3%	19.7%	81.3%	$47,747
112.05	WOODLAND	6.64	7.75	5.90	6.28	85.2	84.3%	36.0%	11.0%	84.0%	$39,042
110.02	WOODLAND	6.93	6.26	7.05	7.47	82.1	92.4%	39.2%	10.6%	91.0%	$46,321

Census Tract	Location	HD Index	HEALTH Index	EDUCATION Index	INCOME Index	Life Expectancy [years]	High School Graduate	Bachelor's Degree	Graduate Degree	School Enrollment [3-24 yo]	Median Personal Income
105.12	DAVIS	7.00	8.32	9.16	3.53	86.4	96.8%	78.1%	47.0%	86.1%	$26,250
105.11	DAVIS	7.18	7.75	8.79	4.99	85.2	94.8%	77.6%	45.8%	82.3%	$32,400
104.01	CLARKSBURG	7.43	6.93	8.34	7.03	83.5	96.8%	64.6%	32.2%	80.6%	$43,482
104.02	WEST SAC	7.62	7.44	6.86	8.55	84.6	91.3%	53.1%	17.2%	79.9%	$54,167
105.09	NORTH DAVIS	7.76	8.76	10.00	4.52	87.4	96.6%	72.0%	45.3%	96.4%	$30,266
106.05	DAVIS	8.01	5.94	9.50	8.58	81.4	99.1%	80.0%	49.2%	89.7%	$54,375
105.08	DAVIS	8.03	8.02	9.70	6.38	85.8	99.2%	84.4%	56.1%	91.8%	$39,583
105.05	DAVIS	8.08	7.75	9.43	7.07	85.2	96.2%	76.9%	45.0%	89.0%	$43,750
106.07	DAVIS	8.71	7.12	9.73	9.27	83.9	97.9%	75.1%	44.5%	92.2%	$60,061
103.1	WEST SAC	NA	0.00	6.62	7.13	NA	91.0%	38.1%	10.5%	87.7%	$44,144

Yolo County Census Tracts, 2016

★Rumsey

★Dunnigan

★Guinda

114
★Zamora

★Knights Landing

115

★Brooks

★Yolo

★Capay
★
Esparto★Madison

109.01 *108*
110.01 *112.05*
112.04
112.06

101.02

105.05

101.01

105.10

102.03

105.08 *106.06*
105.01 *106.07*

103.10 *103.02*
103.12

★Winters

104.02

104.01
★
Clarksburg

Legend

★   Cities & Towns

N

0   3.5   7   14 Miles

Davis Census Tracts, 2016

112.06

COUNTY ROAD 27

COUNTY ROAD 29

COUNTY ROAD 98

COUNTY ROAD 102

105.05

113

113

105.10

COUNTY ROAD 31

105.09

E COVELL BLVD

105.11

106.06

106.05

105.08

105.12

107.03

107.04

107.01

1 ST

5TH ST

2ND ST

106.02

CHILES RD

RUSSELL BLVD

105.13

106.08

106.07

105.01

104.01

COUNTY ROAD 104

N

0   0.75 1.5   3 Miles

West Sacramento Census Tracts, 2016

112.06

112.06

105.05

101.02

OLD RIVER RD

COUNTY ROAD 29

REED AVE

101.01

50

102.04

102.03

102.01

I-80

106.05

CHILES RD

SOUTHPORT PKWY

SOUTH RIVER RD

106.06

106.08

103.10

103.12

103.02

106.07

JEFFERSON BLVD

104.02

OLD RIVER RD

N

104.01

S RIVER RD

0   0.75   1.5   3 Miles
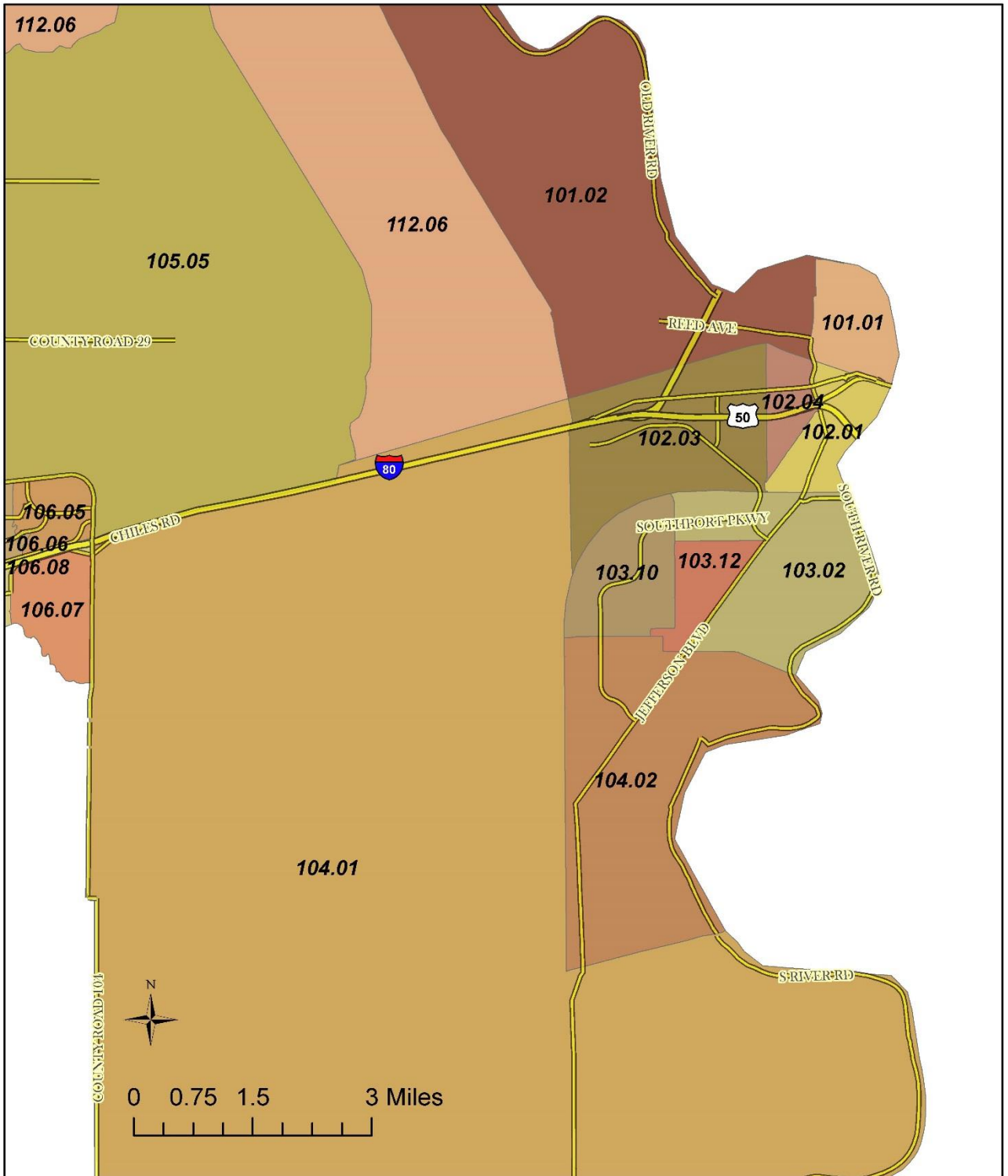
Woodland Census Tracts, 2016