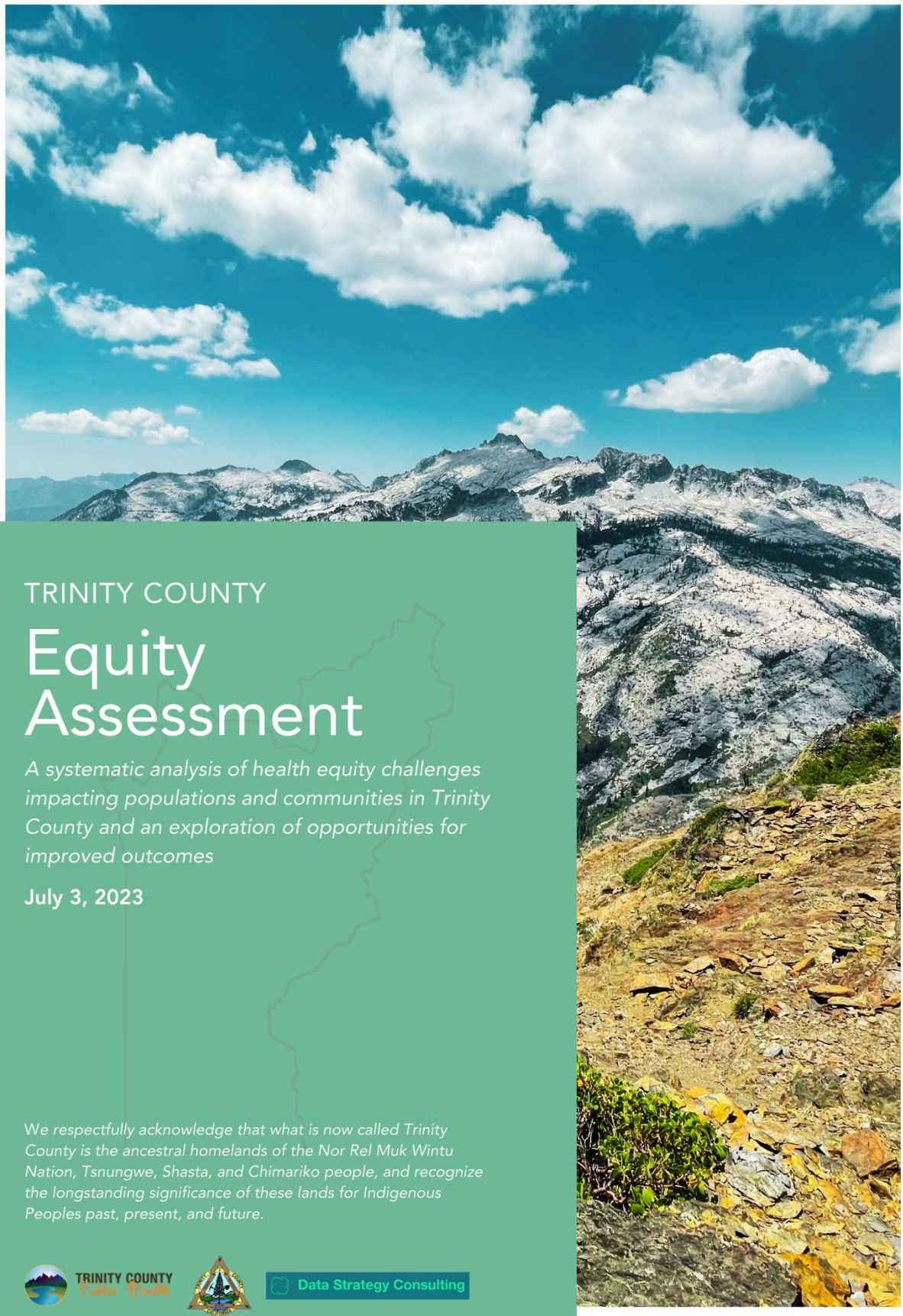

TRINITY COUNTY

Equity Assessment

A systematic analysis of health equity challenges impacting populations and communities in Trinity County and an exploration of opportunities for improved outcomes

July 3, 2023

We respectfully acknowledge that what is now called Trinity County is the ancestral homelands of the Nor Rel Muk Wintu Nation, Tsnungwe, Shasta, and Chimariko people, and recognize the longstanding significance of these lands for Indigenous Peoples past, present, and future.

TRINITY COUNTY Public Health

Data Strategy Consulting

Executive Summary

The Trinity County Health & Human Services Public Health Branch (TCPHB), in collaboration with Data Strategy Consulting, set out to engage residents, partners, communities, and all levels of government to determine the factors that result in the greatest disparities across Trinity County communities and populations.

The Trinity County Community Equity Assessment, although coordinated through TCPHB and funded in part through the California Department of Public Health, is a living document that belongs to all peoples of Trinity County.

The Public Health Framework for Reducing Health Inequities was chosen as a conceptual blueprint to guide indicator selection for quantitative data and information. These indicators include measures of the social conditions that drive the health of a community in addition to health risk behaviors and health outcomes. Qualitative data was obtained through focus groups, key informant interviews, and survey questions and brings context to the quantitative indicators, in essence the *real-life* impacts of inequities.

The quantitative indicators are organized by social, physical, and environmental conditions: structural and institutional conditions; living conditions; and disease, injury, and mortality. These conditions outline the most significant drivers of inequities that contribute to poor health, social, economic, and other outcomes.

The most significant structural and institutional conditions that drive disparities and contribute to lower life expectancy in Trinity County involve income:

- The percent of the Trinity residents living below the Federal Poverty Level was about twice as high as for California overall (23% compared to 12%).
- Families with children under the age 18 were about twice as likely to live below the Federal Poverty Level in Trinity County (31%) compared to 13% statewide.
- Trinity residents also had a lower per capita income ($29,000) compared to California residents ($41,000).

Among the most significant living conditions that contribute to disparities and poor outcomes in Trinity include:

- Only 17% of the Trinity County population had adequate access to a supermarket compared to 51% in California.
- Trinity County residents are 8 times more likely to live in areas with very high risk for wildfire than the residents statewide.
- More than 41% of household income among Trinity County residents was required for childcare expenses in Trinity County compared to 30% for California overall. Trinity County had the highest childcare cost burden among all California counties.

The culmination of the driving factors identified contribute to the overall life expectancy across Trinity County populations. Trinity County has more than twice the rate of premature death than the state as a whole:

- Suicide rates in Trinity County are four times higher than the state.
- Deaths from unintentional injury are three times higher than the state, with motor vehicle collisions and unintentional overdoses responsible for 62% of unintentional injury deaths.

Of the 231 residents responding to the equity survey, almost two-thirds identified economic instability as one of the greatest barriers to equity and 56% of respondents viewed the physical environment as a significant barrier. About 36% reported inequities in the healthcare system, as well as 29% and 28% of respondents identifying education and policies/governance respectively as the barriers.

It is imperative to approach the underlying drivers of inequities across our communities and populations in Trinity County with a renewed understanding of what they are and the impact they have. This is the first step in our systematic approach to addressing the social, economic, and environmental challenges impacting the peoples of Trinity County and the exploration of opportunities and upstream policy development to improve outcomes.

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Introduction

While the terms “equity” and “health equity” are increasingly being used, a common understanding of what they mean seems to be lacking. For the purposes of this report, we use the health equity definition from a 2017 Robert Wood Johnson Foundation report, defining health equity as:

“Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.”[1]

Health equity does not occur by accident. It requires an intentional exploration of the forces that limit it and the systems and structures necessary to achieve it. Embedded within this definition is a recognition that individual and community *needs* will differ depending on the structural, environmental, and historical barriers in place.

This assessment aims to identify the key drivers of health inequities and explore the forces shaping the equity landscape within Trinity County. Quantitative indicators, focus groups, and surveys were employed as tools to identify the most urgent health, social, and equity concerns within the county, as well as potential solutions to remedy them.

By elevating the voices and experiences of constituent groups and residents, this analysis provides insights that can inform collective efforts to improve health equity. The qualitative analysis illustrates and differentiates the quantitative aspects of this assessment and helps to identify the ways in which disparities show up in real life, and how these lived experiences bring a depth of meaning to the empirical data.

Background & Rationale

The journey toward equity began for the Trinity County HHS Public Health Branch (TCPHB) in the Spring of 2019. The TCPHB developed its Strategic Plan as a component of the public health accreditation process and equity was identified as the first priority. On November 6, 2019 the TCPHB convened a Health in All Policies (HiAP) Summit that explored environments, historical trauma, and social determinants of health that contribute to inequities in Trinity County. The HiAP summit, in collaboration with the Health Officers Association of California and the Public Health Institute (PHI) also focused on how to begin to address the underlying factors that drive inequities across communities and individuals. As stated by the PHI HiAP Director Julia Caplan:

“The purpose of Health in All Policies is to transform government, so equity and health are part of the fabric of decision-making across all policy areas and functions. Our goal is not only to embed health and equity into government programs and practices, but to institutionalize the Health in All Policies approach so that it is a normal part of government operations.”

[1] Braveman P, Arkin E, Orleans T, Proctor D, and Plough A. *What Is Health Equity? And What Difference Does a Definition Make?* Princeton, NJ: Robert Wood Johnson Foundation, 2017.

This was precisely the intent of the Public Health Branch in November of 2019. Then in March of 2020, the COVID-19 Pandemic was upon us and Trinity County had its first COVID-19 infection in one of our residents. As the pandemic continued to evolve and threaten the well-being of our residents, healthcare systems, businesses, and schools over the next 24 months, it became clear that COVID-19 would challenge our concept of equity in Trinity County and across the state.

The need to bring innovation to complex equity issues around the acquisition of goods and services to ensure the health of our populations, healthcare systems, businesses, and schools was not only paramount in the moment, but became the impetus for this community equity assessment. The initiation of it was driven by the timing of the General Plan update in order to seize the opportunity to inform the General Plan. This also provided the opportunity for the equity assessment and plan to work with the General Plan through its power to shape the conditions for Trinity County residents. This is an opportunity to essentially operationalize Health in All Policies.

Methods

Quantitative Methods

The Public Health Framework for Reducing Health Inequities[2] was chosen as a conceptual blueprint to guide indicator selection. Data sources[3] were evaluated for availability at the county level, by sub-county geography, by poverty, by race/ethnicity, and by timeliness of updates.[4] Indicators from the Healthy Places Index (HPI) were selected to operationalize many of the concepts in the BARHII framework. These indicators include measures of the social conditions that drive the health of a community in addition to health risk behaviors and health outcomes. Where available, measures were compared to those of California overall, and across available demographic groups. Those areas where disparities were present or where the measure was worse for Trinity County than the state are described.

Qualitative Methods

The qualitative analysis specifically aimed to achieve the following:

1. Expand upon and provide contextual reference to quantitative findings.
2. Explore core social, environmental, and institutional foundations of inequities.
3. Reflect on the diverse manifestations of inequity for residents and people who provide key services.
4. Identify the most promising strategies to reduce inequities and sustainable models of change.
5. Inform advocacy and planning efforts aimed at improving health outcomes and building more equitable systems of care.

This assessment involved nine focus groups and two key informant interviews over a period of about three months with representation from twenty agencies and community partners. The focus groups were held virtually to accommodate participants from different locations and to reduce the barriers of participation. Each focus group lasted approximately 1 hour and was facilitated by a moderator using a semi-structured discussion format to lead the conversation.

A matrix was drafted to identify community groups from a variety of sectors in Trinity County. Participants were assigned subjective ratings based on their degree of community connectedness, influence, and ease of reach.[5] Participants from this matrix were selected using purposive sampling, with a focus on groups and people with experience or expertise in healthcare, social services, government, and working with vulnerable, marginalized, or disenfranchised populations. Potential participants were contacted through email, phone, and in-person communication to invite them to participate in the focus groups, key informant interviews, and a survey. Not all groups reflected in the matrix participated in the final focus groups.

[2] See Figure B in Appendix
[3] See Table C in Appendix
[4] Due to smaller populations and sampling methods by state data sources, disaggregating data by geography, poverty status, or race/ethnicity, was not possible due to lack of data availability or suppression guidelines when there were very high margins of errors.
[5] Table A in Appendix

During the focus group discussions and key informant interviews, participants were asked a series of open-ended questions about their experiences and perspectives related to health equity. Topics included barriers to accessing healthcare and social services, challenges stemming from the structural and systemic drivers of inequity, and opportunities for improving health equity in Trinity County. The following questions were asked:

1. *What does health equity mean to you? Tell me about the thoughts, feelings, and associations that come to mind when you think about equity.*

2. *What are the predominant forms of inequity you see in your practice or day-to-day work?*

3. *What acts as a barrier to equity (policy, structure, systems)? What prevents equity from happening?*

4. *Where have previous interventions or efforts to bring about meaningful change fallen short? Where have they succeeded? Any models you can point to?*

5. *What improvements/interventions do you think would have the greatest impact on health equity?*

6. *How can we ensure that the voices of those most impacted by inequities are informing our practices and driving the solutions and/or interventions we propose?*

7. *What unique strengths within the county should be leveraged to support equity work?*

8. *What important first steps would you take to ensure that we can act on the key strategies and interventions proposed today?*

All focus group discussions were recorded and transcribed for analysis. The transcripts were analyzed using thematic analysis, which involved identifying patterns and themes in the narratives to gain a deeper understanding of the sentiments and perspectives of the participants.

Additionally, a 14-question equity survey was administered between March 21 and May 8, 2023 to hear from a broader range of people and engage additional communities that may not have been reached through the focus groups. Surveys were broadly distributed at food access points in outlying communities[6] and by Trinity County's Health and Human Services' office as part of the intake process for people accessing Medi-Cal services, as well as made available electronically to the public through the Public Health Equity website.[7]

Strengths & Limitations

By relying on more than ten different data sources for the quantitative information, and utilizing focus groups, key informant interviews, and a local survey to hear from residents in spring 2023, this report is able to provide diverse information from multiple sources. The multiple data sources and

[6] These included Junction City, Douglas City, Hyampom, Wildwood, Big Bar, and Coffee Creek.
[7] Chart X in Appendix

methodological approaches helped validate and verify inequities and we believe this strengthened this assessment, rather than just relying on one data source or method alone.

Due to how and what quantitative data is collected by many state systems, there are gaps in information about institutional and structural inequities. There are also gaps in quantitative information on outcomes by geography, poverty, race and ethnicity and other demographics that strongly influence health outcomes and health equity.

We believe this assessment's qualitative approach to this information helped fill in some of these quantitative gaps by hearing directly from Trinity County residents - through focus groups, key informant interviews, and by reaching over 200 Trinity County residents through a community survey.

A lot of the qualitative findings touched on several themes that were supported by quantitative data, though not every theme had an analogous source of quantitative data to support its manifestation. Several qualitative findings illuminated aspects of inequities that were more nuanced and less well understood in the available quantitative indicators.

Results

Population Characteristics

There are about 15,800 residents in Trinity County. The median age of residents is 53.9 years; 16% (about 2,600 people) are under the age of 18 and 28% (about 4,440 residents) are 65 years and older. About 51% of residents are male and 49% of residents are female. [8]

About 4 in 5 residents (79.6%) are White, non-Hispanic residents. About 7.5% of residents are Hispanic or Latino, and 5% are American Indian or Alaska Native. About 3% of residents identify as multi-racial, 2% Asian, 0.6% Black or African American, 0.2% Native Hawaiian or other Pacific Islander, and about 4% identify with other racial identities.

Quantitative Findings

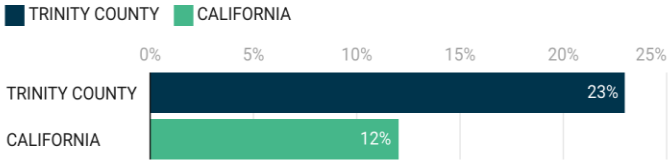
Structural and Institutional Conditions

Income and Employment

Many Trinity County residents struggle economically. The percentage of the Trinity residents living below the Federal Poverty Level was about twice as high as for California overall (23% compared to 12%) (Figure1). Whites and Latinos had similar rates.[9] The more education Trinity residents had, the lower the rate of poverty they had (18% for some college experience and 5% for a bachelor's degree or higher).

Trinity County residents are about twice as likely to live below the federal poverty level than residents statewide

Figure 1. Percent of the population below the federal poverty level



Source: American Community Survey, 2021 5-Year Estimates, Table S1701 • Created with Datawrapper

Families with children under the age 18 were also more likely to live below the Federal Poverty Level in Trinity County (31%) compared to 13% statewide.

Trinity residents also had a lower per capita income ($29,000) compared to California residents ($41,000).

There was a lower workforce participation rate in Trinity compared to California. The labor force participation rate among residents 20 to 64 years old was 56%, compared to 78% statewide. The labor force participation rate was higher among residents 25 to 64 years old who had some college or more

[8] U.S. Census Bureau, 2021 5-Year Estimates, American Community Survey, Table DP05

[9] The estimates of residents living below the Federal Poverty Level for other racial and ethnic groups had high margins of error and are unreliable.

compared to residents with a high school diploma, and higher among residents living above the federal poverty level. Labor force participation rates were similar among racial and ethnic groups.

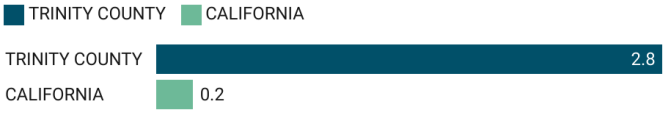
Educational Attainment

Trinity County also faced disparities in education.

In 2021-22, the high school graduation rate was 76% (100 students) compared to 87% for California. In the past three school years,[10] the highest graduation rate has varied between American Indian, Latino, and White students. The student suspension rate was higher in Trinity compared to the state overall (2.8 per 100 compared to 0.2 per 100) (Figure 2) and was highest among White students (3.3 per 100).

The student suspension rate was more than ten times higher in Trinity County than California

Figure 2. Student suspension rate per 100 students



Source: California Department of Education, DataQuest, 2020-21 • Created with Datawrapper

The vast majority (94%) of Trinity residents 25 years and older had a high school diploma or higher compared to 84% of Californians. Trinity residents were less likely to have a Bachelor's degree or higher (19%) than California residents (35%).

Other Structural and Institutional Factors

The rate of Trinity County residents who were incarcerated was nearly three times higher than the state rate (80 per 10,000 compared to 29 per 10,000).

Trinity County has a limited number of primary care physicians and dentists in the county. In 2020, there was one primary care physician for every 3,050 residents, higher than the state ratio of one primary care physician for every 1,230 residents. In 2021, there was one dentist for every 3,210 residents in Trinity County and one dentist for every 1,100 California residents.

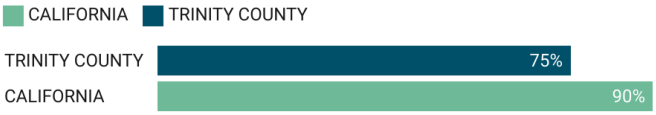
Living Conditions

About 75% of households had access to broadband internet compared to 90% for California overall (Figure 3).

There was less supermarket access in Trinity County than for the state overall (Figure 4). Only 17% of the population had adequate access to a supermarket compared to 51% in California.

Trinity County households are less likely to have access to broadband internet at home than households statewide

Figure 3. Percent of households with broadband internet access



Source: American Community Survey, 2021 5-Year Estimates, Table B28003 • Created with Datawrapper

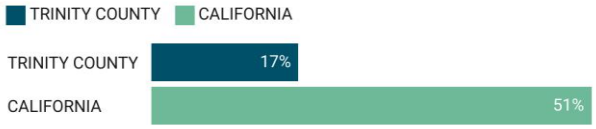
[10] 2019-2020, 2020-21, 2021-22

About 45% of Trinity children (about 1,150 children) lived in single-parent households; about double the rate of California (22%).[11]

More than 41% of household income among Trinity County residents was required for childcare expenses in Trinity County compared to 30% for California overall. Trinity County had the highest childcare cost burden among all California counties.

Trinity County residents had poorer access to supermarkets than residents statewide

Figure 4. Percent of the population with adequate supermarket access



This is measured as the percent of people in rural areas who live less than 1 mile from a supermarket/large grocery store. This is also defined in urban areas as the percentage of the population who live less than a half mile from a supermarket/large grocery store.

Source: USDA Food Access Research Atlas, 2019 • Created with Datawrapper

About one third of Trinity County workers had a short commute, more so than other Californians. About 37% of resident workers 16 years and older had a commute time of 15 minutes or less compared to 20% of California residents.

The percentage of the population living in areas with very high risk for wildfires in Trinity County was significantly higher than the state (56% compared to 7%) (Figure 5).

The rate of violent crime in Trinity County was significantly higher than the California rate (53 per 10,000 compared to 47 per 10,000).

Trinity County residents are about 8 times more likely to live in areas with very high risk for wildfire than residents statewide

Figure 5. Percent the population living in areas with very high risk for wildfire

Source: California Department of Forestry and Fire Prevention, 2007 • Created with Datawrapper

Disease, Injury, and Mortality

Life Expectancy and Premature Mortality

The life expectancy of Trinity County residents was about three years lower than the life expectancy of California residents (78 years compared to 81 years (Figure 6). Life expectancy for White residents was 77 years.[12]

Life expectancy at birth is shorter for Trinity County residents compared to residents statewide

Figure 6. Life expectancy at birth

Source: California Community Burden of Disease Engine, 2018-2022 • Created with Datawrapper

[11] 2017-2021 data

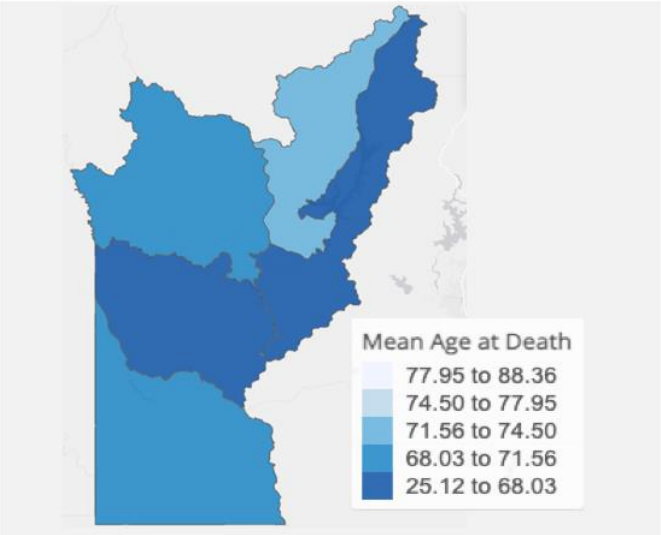
[12] A minimum number of deaths is required to perform a life expectancy calculation. By race and ethnicity, the number of deaths was sufficient to meet these criteria for White, non-Hispanic residents only. White residents make up about 88% of all deaths in the county.

The age-adjusted mortality rate for all causes was higher for Trinity County than California (80 per 10,000 compared to 65 per 10,000). The death rate among White, non-Hispanic residents was higher than the rate among Latino residents (82 per 10,000 compared to 70 per 10,000).

In 2018-2022, the mean age at death for Trinity County residents varied by 5 years across its communities. Weaverville/Coffee Creek had the highest mean age at death at 72.4 years. Junction City/Big Bar/Burnt Ranch/Sayler had a mean age of death of 70.8 years. Ruth/Mad River/Zenia/Kettenpom (68.2 years), Douglas City/Lewison/Trinity Center (67.4 years), and Hayfork/Hyampom/Peanut/Wildwood (67.2 years) had the lowest mean age at death (Figure 7).

The mean age at death varies by community

Figure 7. Mean age at death in years by census tract

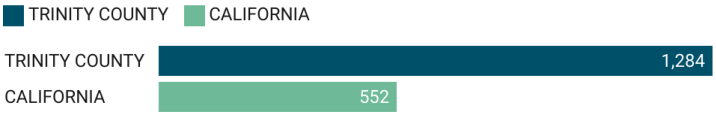


Source: California Community Burden of Disease Engine

The age-adjusted premature mortality rate (Years of Life Lost before age 75 or YLL) in Trinity County was more than double the California rate and the highest among counties in the state (1,284 per 10,000 compared to 552 per 10,000) (Figure 8). In 2018-2022, there were differences in the age-adjusted YLL rate by geography, gender, and race and ethnicity:

Trinity County has more than twice the rate of premature death than California

Figure 8. Age-adjusted rate of premature death (Years of Life Lost before Age 75) per 10,000



Source: California Community Burden of Disease Engine, 2018-2022 • Created with Datawrapper

Geographic differences:

- Kettenpom, Mad River, Ruth, and Zenia (1,474 per 10,000) and Forest Glen, Hayfork, Hyampom, and Peanut (1,427 per 10,000) had the highest rates.
- Douglas City, Lewiston, Trinity Center, and Weaverville had a rate of 1,179 per 10,000.
- Junction City and Salyer had the lowest rate 942 per 10,000.

Gender differences:

- In 2020-22, the age-adjusted YLL rate was about three times higher among males than females (1,902 vs 652 per 10,000), and the rate among males has been increasing since 2008-2010.

Racial and ethnic differences:

- In 2020-22, the age-adjusted YLL rate was similar for Latinos (1,442 per 10,000) and Whites (1,324 per 10,000), and lower among American Indians and Alaska Natives (551 per 10,000).

The age-adjusted suicide death rate in Trinity County was almost four times higher than the state rate (3.8 per 10,000 compared to 1.0 per 10,000) and the highest among all California counties. Almost 93%

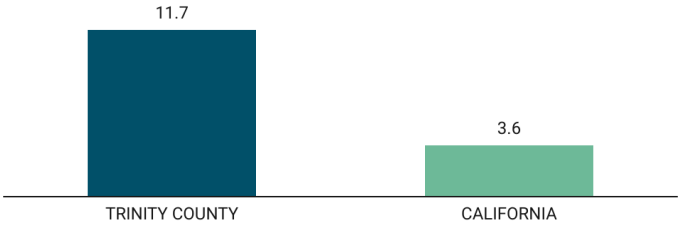
of suicide deaths were among White residents of the county. The suicide death rate for White, non-Hispanic residents, 3.8 per 10,000, was the highest among all White residents in California.

Unintentional Injury

The death rate from unintentional injuries in Trinity County was three times higher than the state rate (11.7 per 10,000 compared to 3.6 per 10,000) and was the highest among all counties in the state (Figure 9). Motor vehicle collisions and unintentional overdoses were responsible for over 62% of these deaths. About 90% of all unintentional injury deaths were among White, non-Hispanic residents with a death rate of 11.9 per 10,000.

The unintentional injury death rate in Trinity County is three times higher than the state rate and the highest rate in the state

Figure 9. Age-adjusted unintentional injury death rate per 10,000



Source: CDC Wonder, 2016-2020 • Created with Datawrapper

More than 40% of unintentional injury deaths in Trinity County were due to motor vehicle collisions. The Trinity County death rate due to motor vehicle collisions was six times higher than that of California (6.4 per 10,000 compared to 1 per 10,000) and is the highest among all counties in the state. White, non-Hispanic residents of Trinity County made up over 80% of all motor vehicle deaths and with a death rate of 6.1 per 10,000. This was the highest rate among White residents of all California counties.

More than one in three driving deaths in Trinity County involved alcohol. The percentage of driving deaths with alcohol-involvement in Trinity County was higher than the state (35% compared to 28%).

Chronic Disease and Disability

About one in five Trinity County residents had one or more disabilities, twice the rate of California (10%). Disability prevalence was higher among American Indian/Alaska Native residents (29%) than White (18%) or Latino (13%) residents, in part due to differences in age between these groups.[13]

The rate of risk-adjusted hospitalizations due to chronic conditions was higher among Trinity County residents compared to the California rate (22.5 per 10,000 compared to 13.9 per 10,000) (Figure 10).

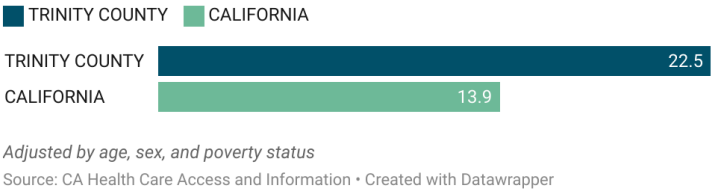
[13] As people age, they are more likely to develop a disability. The age distribution of residents of different geographies and population groups impacts disability prevalence. The median age in Trinity County, 53.9 years, is significantly higher than the median in California overall (37.6 years). Among Trinity County residents the median age for American Indian/Alaska Natives is 67.5 years compared to median ages of 54.5 years for White, non-Hispanics and 32.7 years for Latino.

Trinity County residents 18 years and over were twice as likely as California residents to report being diagnosed with coronary heart disease (7% compared to 3%).

The Trinity County age-adjusted death rate from chronic lower respiratory disease was higher than the state rate (4.3 per 10,000 compared to 3.1 per 10,000). The age-adjusted chronic liver disease death rate among Trinity County residents is nearly double the state rate (2.5 per 10,000 compared to 1.3 per 10,000).

There is a higher rate of preventable hospitalizations in Trinity than there is statewide

Figure 10. Risk-adjusted preventable hospitalizations from chronic conditions, rate per 10,000



Adjusted by age, sex, and poverty status

Source: CA Health Care Access and Information • Created with Datawrapper

Qualitative Findings

General Focus Group Observations

Participants appeared to speak earnestly and candidly with low banter and careful attention and consideration of the questions asked. Reflective pauses were noted with certain audiences while others spoke with more rapid cadence. Stakeholder groups with the highest ratings of connectedness spoke with the most zeal and specificity, depicting everyday scenarios and vividly describing practical circumstances. Discussions flowed unencumbered as respondents often built upon the ideas expressed by their peers. Non-verbal cues indicating agreement were consistently observed and there were very few if any occasions of blatant disagreement or profoundly contradictory viewpoints.

The following describes key sentiments, perspectives, and comments reflected in four or more of the focus groups. As much as possible, the language people used was maintained.

1. Defining Health Equity

- "Meeting people where they are"
- Ensuring that people have access to the things (knowledge, opportunities) to lead healthy and productive lives and to achieve their full potential
- Equity is everyone has the same tools and resources they need to access *care*

"We don't always have the best ideas about what people's needs are – we should ask them"

2. Predominant Forms of Inequity

- Limited access to care and specialty services, difficulty obtaining referrals and then difficulty getting to service even if insurance is present; case acuity escalates resulting in costly emergency room visits
- Reduced physical access to care due to transportation limits; no public transit in remote areas; cost of fueling vehicles, and limited transportation vouchers

- Technology - consumers in remote areas cannot access telehealth services, unreliable internet, and recurrent power outages with no backup systems, some areas have no satellite phone connectivity
- Inadequate and unequal insurance coverage; difficult to navigate challenges of insurance policy; lack of education pertaining to coverage options and eligibility

"Where you are geographically determines what you will receive"

3. Barriers to Equity

- Physical landscape - rural, frontier, dispersed, remote
- Transportation and lack of access to essential resources and services
- Technology deficits - both infrastructural limitations
- Poverty; generational poverty; learned helplessness; lack of viable economic opportunities
- Policies at the state and local level; policies constantly changing, lack of consumer education on navigating healthcare policies, policies impacting ability to effectively deliver services
- Limited resources across several social service domains (housing, reproductive and sexual health, mental health)
- Lack of staff and human resources, lack of providers, consistent 'brain drain"
- Anti-government sentiments, distrust, culture of independence
- Normalization of unhealthy behaviors, public apathy

"Lack of economic resources for self-direction"

"Food stamps do not cover much when you have to shop at the most expensive grocery story and don't have access to others."

4. Where Previous Interventions Have Fallen Short

- Failing to invest the necessary time and effort to earn the community's trust. Successful efforts need to meet people where they are with compassion and empathy; entering communities without taking the time to ask individuals what they need and rather making assumptions about what is needed has failed to bring about meaningful change
- Micro-communities have their own autonomy and leadership and there needs to be consensus building and engagement with those individuals
- Lack of funding, human resources, and data

"Communities get tired of hearing what is going to happen and not seeing it happen."

5. Where Previous Interventions Have Succeeded

- Partnerships, collaboration, working across sectors with a common objective
- Build professionals from the inside out, securing dedicated leadership
- Mobile and field-based services
- Taking time to build trust and get to know the community, establishing local champions and capitalizing on word-of-mouth.
- Administrative flexibility to build programs that suit the population

"Having an individual go into that community and earn the trust is the way you have to do it."

"Meeting people where they are at with compassion and empathy so that people feel welcomed and ready to begin"

6. Interventions that Could Have the Greatest Impact on Health Equity

- Improving accessibility, establishing a location residents can go to access telehealth services in rural remote areas; assistance with funding and supplying transportation
- Targeting the root causes of poverty by building a different and prepared workforce, creating more viable economic opportunities, increasing the living wages in rural communities, investing in early career preparedness
- Developing and maintaining robust communication with micro-communities, provide information at key points of access
- Increase health education and education about disease risk prevention
- Create incentives to attract providers
- Securing more funds for this work

"*Money doesn't solve everything but it helps-a lot!"*

7. Reaching Those Most Impacted

- "Be where the community is"; boots to the ground; don't be afraid to go door-to-door
- Reach residents through the services they are already utilizing – school, church, soup kitchens, farmers market
- Utilize engaged constituents and smaller community-based networks to spread the word, build trust with them and gain buy-in
- Mail-in surveys ("everyone gets their mail") and social media

8. Unique Strengths

- Pride, personal identity, personal responsibility
- Resourcefulness
- Deep sense of community, small close-knit ties, willingness to help
- Natural environment

Survey Findings

Survey Respondents

Two hundred and thirty-one (n=231) residents completed the community equity survey. At least 98% of respondents answered each question, producing a very low rate of missing data.

Nearly 3 in 4 (74%) of survey respondents have lived in Trinity County for 10 or more years, and 7 in 10 residents identified as female. Most respondents resided in East Trinity County (60%), followed by West (21%) and South (15%), and 2% reported living in North County. Nearly 3 in 4 (74%) of respondents were 40 years old or older, with 36% reporting being "60 or older." About 81% of respondents were white, non-Hispanics, 9% were American Indian or Alaska Native, 4% were multi-racial, and 4% were Latino or Hispanic. About 2% were Asian and 2% were Native Hawaiian or Other Pacific Islander. [14]

Survey respondents reported working or being affiliated with the following sectors:

- Education (19%)
- Government (17%)
- Other (17%), which included non-profit organizations, volunteers, and small business
- Healthcare (11%)
- Industry (7%)
- Tribal (4%)
- About 1 in 4 reported "no affiliation."

Survey respondents learned about the survey in the following ways:

- Community event or gathering (36%)
- Email (26%)
- Other (13%)
- Website (9%)
- Facebook (9%)
- Newspaper (3%)
- Friend or family (3%)

Experience of Inequities

Survey respondents identified "Older adults" and "Adolescents and Young adults" as two groups that experienced the most inequities (identified by 47% and 40% of survey respondents, respectively).

Nearly 2 out of 3 (63%) respondents reported experiencing inequities, and about 1 in 3 (37%) reported they have not experienced inequities. About 4 in 10 (41%) of respondents reported experiencing "lack of access" in their personal or professional life. About 1 in 4 (26%) reported experiencing "bias/discrimination" and about 1 in 4 (26%) also reported "being treated unfairly or differently from peers."

[14] Survey respondents were more likely to be female than the county adult population, less likely to be 18-39 years old than the county adult population and slightly less likely to be Latino or Hispanic.

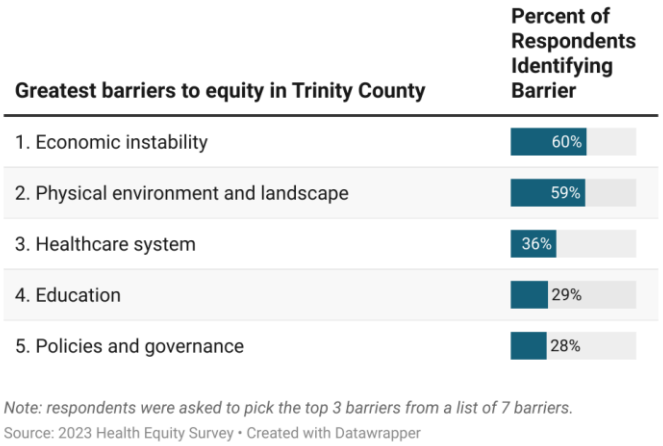
Health Equity Barriers

Almost two thirds of respondents believed “Economic Instability” was one of the greatest barriers to equity. This was closely followed by the "Physical Environment" which 56% of respondents viewed as a significant barrier. Over a third (36%) reported that the "Healthcare System" posed a great barrier and just under a third (29%) reported “Education” and 28% reported “Policies and Governance” (Figure 11).

Respondents largely believed that efforts to properly address inequity have failed due to "poorly addressing root causes" and "insufficient resourcing." Nearly 1 in 4 (23%) respondents reported "I don’t know.”

Economic instability and the physical environment were identified by 3 in 5 survey respondents as the greatest barriers to equity in Trinity County

Figure 11. Greatest barriers to equity in Trinity County according to survey respondents (N=225), Spring 2023.



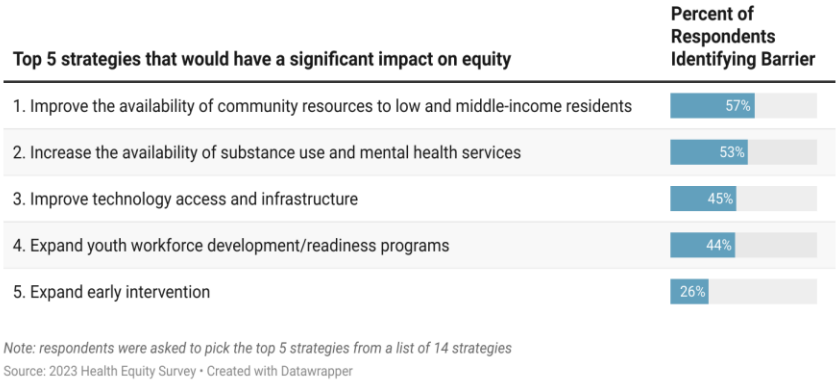
Strategies

The top 5 strategies that respondents believed will have the most significant impact on equity include:

1. improving availability of community resources to low and middle-income residents (57%)
2. increasing the availability of substance use and mental health services (53%)
3. improve technology access and infrastructure (45%)
4. expanding youth workforce development/readiness programs (44%)
5. expand early intervention (26%) (Figure 12).

The majority of survey respondents identified improving the availability of community resources to low and middle-income residents (57%) and availability of substance use and mental health services (53%) as strategies that would have the most impact on equity

Figure 12. Top strategies that would have the most impact on equity in Trinity County, according to survey respondents (N=226), Spring 2023



Discussion

Quantitative Indicators

The economic hardship residents experience is evidenced by the percentage of the population residing below the federal poverty level. This may partially be the result of lower educational attainment. The physical environment and living conditions may further compromise academic, economic, and professional pursuits as about 1 in 4 households lack broadband access, an integral component in a modern economy.

Access to vital services is a pronounced challenge, with less than a fifth of residents having adequate access to a grocery store compared to 51% of individuals across the state. These establishments not only provide critical access to food and supplies, but they are also vital points of connection, linking dispersed residents and acting as a conduit to services and pertinent information around the county.

The burden of illness and premature mortality highlights a stark contrast in life expectancy between Trinity County and the state. With injury deaths in particular driving premature mortality brings additional relevance to "deaths of despair," which include suicide, overdose, and alcohol-related deaths. Regional differences also exist with South County experiencing higher age-adjusted premature mortality than residents in East County. With the highest rates of suicide in the state and elevated rates of death from chronic illness, Trinity County is facing a barrage of forces both internal and external to the county that are reducing quality of life and leading to premature death.

Qualitative Information

The focus group discussions and survey results revealed several key themes:

1. Impact begins with Authentic, Personalized Engagement

Dismantling inequities requires thoughtful recognition of the unique needs of individuals and their communities. Passionate and consistent comments were made about meeting people where they are at, recognizing individuality and the inherent uniqueness of remote communities. This approach acknowledges that everyone has different needs, priorities, and challenges, and seeks to engage with people in a manner that is meaningful and respectful. Meeting people where they are at can involve a range of strategies, such as listening actively, asking questions, and building relationships based on trust and mutual respect. It can also involve tailoring interventions or supports to meet the specific needs of a particular group or individual, rather than imposing a one-size-fits-all solution. Communities often know what they need, and respecting their autonomy and self-awareness positions providers and public service agencies to best serve these populations.

2. Predominant Barriers are Rooted in Structural and Environmental Challenges

a) **Limited Broadband Access**: Many remote parts of the county lack access to high-speed internet, which is essential for telemedicine, electronic health records, and other healthcare technologies. This makes it difficult for healthcare providers to communicate with patients, share medical information, and provide remote consultations.
b) **Shortage of Healthcare Providers and Skilled Professionals**: Trinity County faces a shortage of healthcare providers, particularly specialists. This makes it difficult for residents to access specialized care and can result in longer wait times for appointments and longer travel times to access care.
c) **Limited Economic Opportunity**: The county lacks employment opportunities and professional development training for residents from primary school to adulthood. The lack of robust industry has reduced the quality and availability of secure employment for residents.
d) **Geographic Isolation**: Trinity County is geographically isolated, with long distances between healthcare facilities and communities. This can make it difficult for residents to access care, particularly in emergencies, and can result in delays in care delivery.
e) **Limited Funding**: The county has limited funding for healthcare and social services, which can limit the types of services available, and the quality of care provided. This can make it difficult to attract and retain healthcare providers and a diverse network of allied professionals.

3. Poverty is both a Symptom and a Driver

Lack of economic opportunity and entrenched poverty creates conditions and circumstances that drive health inequities and lead to poor health outcomes. Whether by limiting access to quality healthcare, reducing the resources residents possess to invest in healthy habits, or by producing health damaging and high levels of chronic stress, respondents conveyed that poverty was a foundational impediment to measurably improving the quality of life of Trinity County residents. This cycle of poor health outcomes is often passed down across generations, producing lineages of "learned helplessness," hopelessness, and destitution. Meaningful progress towards dismantling systemic inequities cannot occur without intentional dedication to creating more viable economic opportunity. Addressing the social determinants of health as a collective (income, education, employment, housing, environment, etc.) is fundamental to disrupting the arc of inequity and improving health and economic outcomes of residents.

Meaningful progress towards dismantling systemic inequities cannot occur without intentional dedication to creating more viable economic opportunity.

4. Identity May be Leveraged to Combat Distrust

A sense of endearing and unyielding personal identity is profound and resonate. Independence, solitude, and individual and communal resourcefulness appear to be hallmarks of the county. These are qualities that often compromise efforts to build trust with external entities, however they simultaneously produce a distinct sense of loyalty and camaraderie within members of tight knit communities. Authentic relationships can be established where value propositions are understood, respected, and relevant to the populations impacted. When these ingredients are present, residents demonstrate a deep willingness to listen and engage.

5. Early and School-based Investments Create Dual Opportunity

Investing in educational opportunities for the future workforce through youth career and technical training programs can improve educational attainment and reduce socioeconomic based achievement gaps. Academic settings create centralized locations to provide stabilizing and preventative services such as mental health care as demonstrated by a successful school-based mental health program described by participants.

With teen mental health challenges on the rise, providing support in a safe and stabilizing environment such a school-based setting can promote resiliency and healthy coping behaviors that further support both better academic achievement and more equitable opportunity over time.

The need for more school-based and early career investments is also underscored in the quantitative data. The percentage of Trinity County residents living below the poverty level is twice that of the state's rate and residents are less likely to have a bachelor's degree or higher. The more education residents have, the less likely they are to live below the federal poverty level. Labor force participation rates are higher among residents who have some college or more compared to residents with a high school diploma, and higher among residents living above the federal poverty level.

6. A Dearth of Policies

Though fewer comments were made pertaining to policy, participants described a policy landscape that lacked vision and concerted effort towards addressing inequity. The dearth of substantive policy addressing factors that contribute to inequity, and the lack of apparent systems that can intervene upon or mitigate the unintentional impacts of policies on health equity, was highlighted. Existing policies may unknowingly exacerbate inequities either through execution, limited guidance, and low literacy.

7. Specialized Talent is Expensive, but its Absence is Costlier

Escalating health issues resulting in acute care visits or forgone care is a tremendous sustainer of poor health outcomes and inequitable systems of care. Limited referral networks and even more difficulty accessing the ones that do exist, places significant strain on the entire healthcare infrastructure. The brain drain is real and palpable, with both tangible and intangible human costs. This is also supported by quantitative indicators, with the Trinity County primary care physician to resident ratio double that of the state ratio.

8. Social Safety Nets Still Leave Many Exposed

Many middle- and working-class residents do not qualify for social safety net programs, however they still experience tremendous economic hardship. The inability to provide them with critical supports and resources exacerbates inequities and leaves individuals at risk of falling into more precarious circumstances.

Likewise, older and aging adults were also identified as a vulnerable population. Limited services, geographic isolation, and increased health challenges place a unique burden on this population and necessitates more targeted support for this community.

9. Housing is a Fundamental Component of Stability

Infrastructure is a persistent challenge. The lack of affordable housing options for low- and middle-income residents was highlighted as a predominant barrier by survey respondents. Housing insecurity has broad impacts on health, safety, educational attainment, and personal wellbeing. Housing costs are often the largest expense for families. When housing becomes unaffordable, a significant portion of income gets allocated to housing, reducing the available dollars for other necessities such as health insurance, childcare, and even food. The inability to catch up can place families under persistent pressure and reinforces the cycle of poverty.

Unstable housing including frequent moves and crowded living situations can disrupt educational programs, leading to higher absentee and dropout rates. Substandard living conditions can increase exposure to environmental hazards that compromise health and increase the risk of illness. Displacement, particularly among marginalized communities, can lead to broken social networks and reduce community cohesion, and this can further increase inequities.

10. Additional Observations

A heaviness was expressed in some of the focus groups upon reflecting on the tremendous need and seemingly intractable forces maintaining the status quo, though this weariness never came through as hopelessness or resignation. Rather, peoples' overwhelming commitment and dedication to equity was perpetually conveyed in their responses.

Overall, there were fewer comments than anticipated related to policy, structural, or institutional barriers and even fewer comments relating to the historical drivers of inequities such as prejudice and discrimination were discussed. It was difficult to assess whether participants felt these factors carried less relevance in the current context of health equity or if there was a discomfort in bringing them to the forefront.

Likewise, though substance abuse was discussed, it emerged as more of a symptom than a primary driver of inequity. Survey respondents reported a desire to see more "sobriety support," particularly services from agencies without religious affiliations.

Participants seemed challenged when asked to describe models of success. Though some were mentioned, only a few were discussed at length. One example in particular was a school-based mental health pilot that was successful in creating wellness liaisons that could identify needs and connect students to care. Participants seemed more inclined to offer strategies that they found promising. Some mentioned "plan fatigue" around initiatives that emerged without clear or constructive conclusions. And some expressed an interest in learning about examples or models that had been successful in similar environments.

Strategies and Recommendations

Promising Strategies Share the Common Objective of Furthering Access

1. **Increase outreach efforts/build sustainable partnerships**: Stakeholders emphasized the importance of community engagement and targeted collaboration. They highlighted the need for community-based organizations and government agencies to work closely with community members to identify their needs and priorities, and to develop tailored solutions that address the social determinants of health that are unique to their residents and micro-communities. Healthcare providers and social service providers can increase their outreach efforts to engage with residents in remote, isolated communities by targeting specific micro communities and their **informal leaders**. This can include hosting health fairs, providing more information at central points of access, and partnering with community organizations that are already working with and trusted by those communities to raise awareness about available services.

2. **Expand broadband access:** Allocate resources to expand and upgrade broadband infrastructure; conduct broadband mapping to identify areas with limited connectivity; collaborate with private entities to leverage their expertise and resources for expanding access.

3. **Maximize telemedicine and telehealth technologies**: Telemedicine and telehealth technologies can be used to provide remote consultations and virtual visits to patients in remote, isolated communities. This can help improve access to care and reduce travel times for patients.

4. **Offering community-based services**: Healthcare providers and social service providers can offer community-based services, such as mobile clinics, home visits, and transportation services to make healthcare and social services more accessible to residents in remote, isolated communities.

5. **Support affordable housing initiatives:** Community leaders can partner with nonprofits and private industry to pursue the following: partnerships with housing authorities to provide grants and subsidies for affordable housing development; prioritize the repurposing of existing infrastructure for housing development; collaborate with state and regional agencies to advocate for and develop policies that prioritize rural housing affordability; promote development incentives.

6. **Expand workforce investments:** Effective workforce investments are employer-led, inclusive of multiple community partners including educational institutions and labor unions, and directly link workforce development with economic development. Assess existing workforce assets including identifying worker skill strengths and gaps across multiple industry domains; determine core industry and employer specific needs and growth areas and invest in training and workforce education programs to upskill the current labor force.

7. **Pool resources for broader impact**: Stakeholders identified several resources and supports that they need to be more effective in addressing health equity issues. These included funding for capacity-building, training and technical assistance, and partnerships and collaborations with other organizations. By combining limited resources and funding allocations, agencies can work towards larger shared objectives particularly around issues pertaining to infrastructure and access, increasing their collective impact.

8. **Capitalize on civic engagement**: Utilize agencies and programs that mobilize residents to support one another through volunteerism. Train engaged residents to be effective liaisons of information, services, as well as vital thought partners for locally sustainable interventions or efforts.

9. **Enhance the value proposition**: The culture of distrust requires that people understand the value of support and resources for people. That requires trust and authentic visibility and transparency.

Conclusion

This health equity assessment was conducted to identify the key drivers of health inequities and explore the forces shaping the equity landscape within Trinity County. Quantitative indicators, focus groups, and surveys were utilized to uncover the most urgent health, social, and equity concerns within the county, as well as potential solutions to address them.

Empirical data revealed stark inequities in income and educational attainment, living conditions, disease, and life expectancy, particularly across income levels within Trinity County, and compared to the state. Surveys and focus groups of residents explored the predominant forms of inequities in more vivid detail, uncovering the barriers to achieving equity, pitfalls from previous interventions, and potential strategies for impact. *Poverty, isolation, limited economic opportunity, and infrastructure challenges emerged as persistent drivers.*

Capitalizing on local partnerships and civic engagement, expanding broadband access, and maximizing services that meet citizens where they reside were articulated as promising strategies. Avoiding intervention models that poorly account for the unique challenges faced by rural, frontier counties, and championing local and regional policies that promote critical investments is foundational for acting on recommendations and furthering equity efforts. This assessment also identified notable community assets, one being Trinity County's tremendous sense of identity and profound resilience. These hallmarks are embedded in the county's consciousness and should be harnessed for meaningful action to improve the quality of life for residents of Trinity County.

A more healthy and promising future for residents necessitates investments in more equitable access, opportunity, and stabilizing community supports and resources. The insights provided in this assessment aspire to support bold and concerted steps towards realizing that vision.

Appendix

Table A. Stakeholder Engagement

Type of Agency/Group	Agency Name and Type	Primary Method of Engagement (focus group, interview, survey)
Public Health or Healthcare	Aurora Midwifery	Focus Group
Public Health or Healthcare	WIC Services	Focus Group
Public Health or Healthcare	Communicable Disease Program	Focus Group
Public Health or Healthcare	MCAH Program	Focus Group
Public Health or Healthcare	Health Systems Collaborative	Focus Group
Public Health or Healthcare	Opioid Safety Coalition	Focus Group
Racial, ethnic, or cultural groups	Tsnungwe Council	Focus Group
Leadership - Govt	Trinity County Office of Education	Interview
Leadership - Govt	Health Services Director	Interview
Public Health or Healthcare	Jail Health	Interview
Public Health or Healthcare	Mountain Communities (clinics)	Interview
Public Health or Healthcare	Redding Rancheria - Trinity Health Center	Interview
Public Health or Healthcare	Trinity Hospital	Interview
Public Health or Healthcare	Partnership Healthplan	Interview
Public Health or Healthcare	PATH (Partnership in Action for Trinity Health)	Focus Group
Social Service	HHS Eligibility/CalWorks	Interview
Social Service	Child Welfare Services	Interview
Social Service	Adult Protective Services	Interview
Social Service	Veterans Services	Interview
Communities of Interest	Burnt Ranch Community	Focus Group or Survey
Communities of Interest	Southern Trinity Co.	Focus Group or Survey
Communities of Interest	Hayfork Community	Focus Group or Survey
Communities of Interest	Trinity Center Community	Focus Group or Survey
Communities of Interest	Post Mountain Community	Focus Group or Survey

School Districts	Trinity Alps Unified	Survey
School Districts	Mountain Valley Unified	Survey
School Districts	Southern Trinity Joint Unified	Survey
School Districts	Lewiston School District	Survey
School Districts	Junction City School District	Survey
School Districts	Coffee Creek School District	Survey
School Districts	Douglas City School District	Survey
Faith-based	Trinity Congregational Church	Focus group
Faith-based	Weaverville Church of Nazarene	Focus group
Faith-based	Holy Trinity Lutheran Church	Focus group
Faith-based	Seventh Day Adventist Church	Focus group
Faith-based	Kingdom Hall of Jehovah's Witnesses	Focus group
Community / Volunteer	Rotary (Weaverville & Hayfork)	Focus Group
Community / Volunteer	Trinity County Food Bank	Interview
Racial, ethnic, or cultural groups	Tribal TANF Partnership	Interview
Racial, ethnic, or cultural groups	Nor Rel Muk Wintu Nation	Focus Group/Survey
Professional Industry	Trinity Co. Agriculture Alliance	Survey
Professional Industry	Trinity Chamber of Commerce	Focus Group
Leadership - Govt	Board of Supervisors	Interview
Leadership - Govt	County Administrative Officer	Interview
Leadership - Govt	Office of Emergency Services	Interview
Leadership - Govt	First 5 Commissioner	Interview
Leadership - Govt	County Department Heads	Interview
Racial, ethnic, or cultural groups	Hmong Community	Interview

Figure B. A Public Health Framework for Reducing Health Inequities

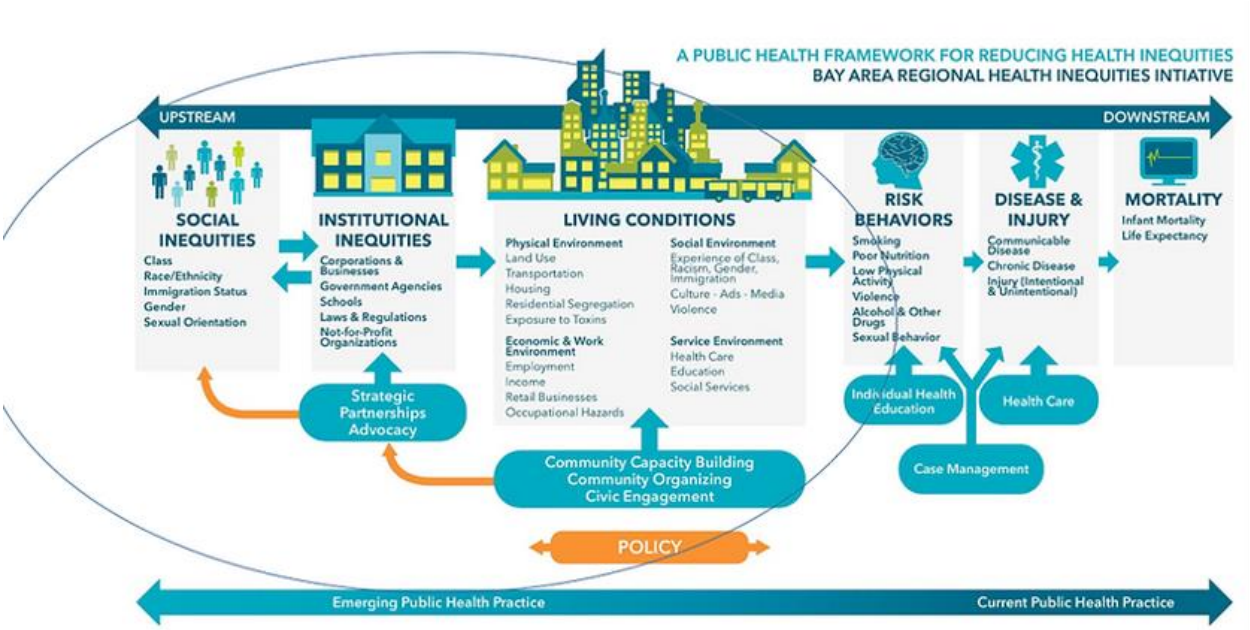


Table C. List of Quantitative Indicators and Corresponding Data Sources

INDICATOR	DATA SOURCE
4-year cohort graduation rate	CA Department of Education, DataQuest, Four Year Cohort Graduation Rate, 2021-22
Bachelor's degree or higher	American Community Survey, 2017-2021 5-Year Estimates Table DP02
Below poverty	American Community Survey, 2017-2021 5-Year Estimates Table S1701
Employed	American Community Survey, 2017-2021 5-Year Estimates Table S2301
Families below poverty	American Community Survey, 2017-2021 5-Year Estimates Table S1702
Incarcerated people per 1,000	RACE COUNTS; racecounts.org, 2020. CASPP, 2018
Per capita income	American Community Survey, 2017-2021 5-Year Estimates Table B19301
Ratio of population to primary care physicians	RWJF County Health Rankings; Area Health Resources Files (AHRF) 2020
Ratio of population to mental health providers	RWJF County Health Rankings; Area Health Resources Files (AHRF) 2021
Student suspension rate	CA Department of Education, DataQuest, Suspensions 2020-21
Average commute time to work	American Community Survey,2 017-2021 5-Year Estimates Table B08012
Broadband access	American Community Survey, 2017-2021 5-Year Estimates Table B28003

Childcare cost burden	**RWJF County Health Rankings; California Childcare Portfolio, 2021-2022**
Single parent households	**RWJF County Health Rankings; American Community Survey, 2017-2021 5-Year Estimates**
Supermarket access	**USDA Food Access Research Atlas**
Violent crime	**California Department of Justice's Criminal Justice Statistics Center, California Crimes and Clearances Files, 2021**
Wildfire risk	**Healthy Places Index, 3.0; California Department of Forestry and Fire Prevention, 2007**
Age-adjusted mortality rate from chronic liver disease	**CDC Wonder, 2016-2020**
Age-adjusted mortality rate from chronic lower respiratory disease	**CDC Wonder, 2016-2020**
Age-adjusted mortality rate	**California Community Burden of Disease Engine, 2019-2021**
Age-adjusted motor vehicle traffic death rate	**CDC Wonder, 2016-2020**
Age-adjusted premature mortality rate	**California Community Burden of Disease Engine, 2018-2022**
Age-adjusted suicide death rate	**CDC Wonder, 2016-2020**
Age-adjusted unintentional injury deaths	**CDC Wonder, 2016-2020**
Alcohol-Impaired driving deaths	**RWJF County Health Rankings, Fatal Analysis Reporting System, 2016-2020**
Coronary heart disease prevalence	**CDC Places, 2020**

Disability	**American Community Survey, 2017-2021 5-Year Estimates Table S1810**
Life expectancy	**California Community Burden of Disease Engine, 2018-2022**
Preventable hospitalizations for chronic conditions	**Calculated: CA Dept of Health Care Access and Information, Patient Discharge data, 2021**

Acknowledgments

We extend our sincere gratitude to all those who dedicated their time, energy, insights, and expertise, all of which played an indispensable role in this project. We would like to extend a special acknowledgement to the many stakeholders, community members, and leaders, as their contribution has been vital in ensuring the detailed fulfillment of the Trinity County Equity Assessment.

We dedicate this to the people of Trinity County, of all ages and in every community.

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