

SAN LUIS OBISPO MEXICAN INDIGENOUS COMMUNITY STUDY: REPORT OF FINDINGS

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COUNTY OF SAN LUIS OBISPO HEALTH AGENCY PUBLIC HEALTH DEPARTMENT



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Image from the Codex Nuttall (Mixtec)

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Acknowledgments

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You can learn more about the study and access the executive summary on the project website: www.slomics.org

Introduction

Mexican Indigenous peoples, such as Mixteco, Amuzgo, Tlapaneco, and Triqui communities, are integral to the social, economic, and cultural fabric of our society. In San Luis Obispo County, this community is an overlooked portion of the Latinx and immigrant population, despite making substantial social, economic, and cultural contributions, including the growing of food through the agriculture industry.¹

Understanding the health needs of the Latinx Indigenous populations is crucial for fostering equity within the community. By delving into the unique challenges and strengths of this population, we aim to inform targeted interventions that can significantly impact public health and overall community well-being. Recognizing and addressing health disparities enhances the quality of life for individuals within the community and fosters inclusivity and shared prosperity.³

Farmworkers, immigrants, and Latinx communities, especially Latinx Indigenous peoples, are more likely to experience risk factors that can contribute to negative health, including lack of health insurance, limited economic resources, language barriers, transportation barriers, legal exclusions, and socio-cultural marginalization.⁴

¹ In this report, we use Latinx to refer to all peoples whose origin and/or identity is tied to Latin America. In the survey we describe, there was one respondent who was from South America, but all others were from Mexico. Since this is a statistical outlier, we refer to both the sample and population as Mexican Indigenous throughout. While Latinx is an important term to describe a broader community, the specific dynamics of regional migration and transnational politics in Mexico impact this community and the information provided. For more information, see Blackwell, Maylei, Floridalma Boj Lopez, and Luis Urrieta. "Special Issue: Critical Latinx Indigeneities." Latino Studies 15, no. 2 (July 1, 2017): 126–37. Access Online.

² Espinoza-Kulick, Mario Alberto Viveros. "Movement Pandemic Adaptability: Health Inequity and Advocacy among Latinx Immigrant and Indigenous Peoples." *International Journal of Environmental Research and Public Health* 19, no. 15 (2022): 8981. <u>Access Online</u>; Espinoza-Kulick, Mario Alberto Viveros, and Jessica P. Cerdeña. "'We Need Health for All': Mental Health and Barriers to Care among Latinxs in California and Connecticut." *International Journal of Environmental Research and Public Health* 19, no. 19 (2022): 12817. <u>Access Online</u>; Espinoza-Kulick, Mario Alberto Viveros, Maura Fennelly, Kevin Beck, and Ernesto Castañeda. "Ethnic Enclaves." In *Oxford Bibliographies of Sociology*. Oxford, England: Oxford University Press, 2021. <u>Access Online</u>

³ Espinoza-Kulick, Mario, Alex Espinoza-Kulick, Elisa González, and Jodene Takahashi. "Immigration Policy Is Health Policy: News Media Effects on Health Disparities for Latinx Immigrant and Indigenous Groups." *Health Promotion Practice*, March 1, 2023, OnlineFirst. Access Online.

⁴ Bade, B. "Alternativas a la Medicina Clínica Empleadas por los Mixtecos Migrantes en California" Moreno Yánez and Douglas Sharon eds. Pontificia Universidad Católica del Ecuador: 49 Congreso Internacional de las Americanistas, 1997; Diringer, J, C. Ziolkowski, N. Paramo, *Hurting in the Heartland: Access to Health Care in the San Joaquin Valley*, Rural Health Advocacy Institute, California Rural Legal Assistance Foundation, 1996; Bade, B., *Sweatbaths, Sacrifice and Surgery: The Transmedical Health Care of Mixtec Migrant Families in California*, Doctoral Dissertation, Riverside: University of California, 1994; Bade, B., *Problems Surrounding Health Care Utilization for Mixtec Migrant Farmworker Families in Madera, California*, Davis: California Institute for Rural Studies. 1993.

The current assessment of this population was prompted by the heightened attention placed on issues of public health, health equity, and health communication during the COVID-19 pandemic. The coordinated effort from the public, community leaders, and elected officials to distribute personal protective equipment, COVID-19 tests, and vaccines highlighted longstanding issues that marginalized communities have experienced in the realm of western clinical medicine and public health.⁵ Specifically, health workers faced barriers to implementing COVID-19 responses, such as mistrust of medical providers, lack of capacity among healthcare professionals, especially in rural and low-income areas, and persistent financial, linguistic, and cultural barriers that are more likely to affect Mexican Indigenous communities.⁶

The findings of our study highlight the size, demographics, and health needs of the Latinx Indigenous population currently residing and/or working in San Luis Obispo County. Based on survey responses from 325 individuals, we can generalize to their families and the larger community that they represent. This provides vital information for service providers, elected officials, community members, stakeholders, and local leaders to reach marginalized groups and address public health concerns that address our shared well-being more effectively.

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⁵ Villarejo D, McCurdy SA, Bade B, Samuels S, Lighthall D, Williams D, 3rd. The health of California's immigrant hired farmworkers. Am J Ind Med. 2010;53(4):387-397; Bade, B. "Farmworker Health in Vista, California" in Ties that Bind: Mexican Migrants in San Diego County. Richard Kiy and Chris Woodruff, (Eds.), Boulder, CO: Lynne Reinner Publications, 2005; Bade, B. "Alive and Well: The Generation of Alternatives to Biomedical Health Care by Mixtec Migrant Families in California" in Indigenous Mexican Migrants in the United States: Building Bridges between Researchers and Community Leaders, Jonathan Fox and Gaspar Rivera-Salgado, eds., Center for U.S.-Mexican Studies and Center for Comparative Immigration Studies, 2004; Diringer, J. K. Curtis, C. McKinney Paul, D. Deveau. Health in the Heartland: The Crisis Continues A Report on Health Status and Access to Care in the San Joaquin Valley, Central Valley Health Policy Institute, CSUF, 2004; Villarejo, D., B. Bade, D. Lighthall, D. Williams, A. Souter, R. Mines, S. Samuels, and S. McCurdy, "Access to Health Care for California's Hired Farm Workers: A Baseline Report." California Program on Access to Care, California Policy Research Center, University of California Office of the President. 2001; Villarejo, D., B. Bade, D. Lighthall, D. Williams, A Souter, R. Mines, S. Samuels, and S. McCurdy. "Suffering in Silence: A Report on the Health of California's Agricultural Workers" The California Endowment, 2000; Diringer, J. Paradox in Paradise: Hidden Health Inequities on California's Central Coast, Diringer and Associates, 2006; California Institute for Rural Studies, Farmworker Housing Study and Action Plan for Salinas Valley and Pajaro Valley, 2018; Maxwell, Annette, Sandra Young, Catherine M. Crespi, Roena Rabelo Vega, Reggie T Cayetnao, and Roshan Bastani. "Social determinants of health in the Mixtec and Zapotec community in Ventura County, California." International Journal of Equity in Health. Access Online. Mines, Richard, Sandra Nichols, and David Runsten. "Final Report of the Indigenous Farmworker Study (IFS) to the California Endowment." 2010. Access Online

⁶ Borbolla, Julio Vaquiero. "In reporting on health challenges faced by Mixtec immigrants, gaining trust proves crucial." *Center for Health* Journalism, 2015; COFS Collaborative Research Team "Experts in their Field: Contributions and Realities of Indigenous Campesinos During the COVID-19 Pandemic," California Institute for Rural Studies, 2021. <u>Access Online</u>; Bade, B., Ramirez, S., and Saxton, D "Always Essential Perpetually Disposable: California Farmworkers and the COVID-19 Pandemic," California Institute for Rural Studies, 2021. <u>Access Online</u>; UC Merced Farmworker Health in California: Health in a Time of Contagion, Drought, and Climante Chagne, 2022.

Figure 1 shows stakeholders from the Mexican Indigenous community, along with representatives from key organizations, gathered to hear preliminary findings of this study and provide input to the project team.

Methods

This project consisted of a partnership between a long-established Central Coast indigenous advocacy organization, Mixteco/Indígena Community Organizing Project (MICOP) and university-based and independent investigators. Building from many decades of lived

experience, as well as expertise in survey design, outreach with Latinx Indigenous groups, cultural humility, and data collection procedures, the team recruited and trained three Mexican Indigenous community interviewers who conducted surveys in Mixteco and Spanish. Data were then analyzed to identify both convergent and divergent trends. Throughout the process, the study was guided by the principles and practices of a decolonial framework. This yielded substantial information and significant Figure 1. Community Presentation of Preliminary Findings findings for stakeholders.



Decolonial Framework

Utilizing a decolonial perspective informs all stages of the project from conceptualization to design, implementation, analysis, and dissemination of findings. Decolonial frameworks are a specific approach to generating knowledge that aligns with efforts to restore, defend, and cultivate Indigenous sovereignty and self-determination while working to unsettle and disrupt dynamics of settler-colonialism that dominate western scientific approaches. This is aligned with many of the tools and practices of other approaches with shared values, such as

⁷ Smith, Linda Tuhiwai. *Decolonizing Methodologies: Research and Indigenous Peoples*. 2 edition. London: Zed Books, 2012; Santamaría, Lorri M. R. J., Cristina Santamaría Graff, Adriana Diego, Liliana Manríquez, Alberta Salazár, Claudia Lozáno, Luisa León Salazár, Silvia García Aguilár, & Genevieve Flores-Haro. "Co-Decolonizing Research Methods: Toward Research Sustaining Indigenous and 'Other' Community Engaged Ways of Knowing." Access Online; Tseng, Marilyn, Mario Alberto Viveros Espinoza-Kulick, Karen Munoz-Christian, Irebid Gilbert, Patty Herrera, Esperanza Salazar, Tejal Vinchhi, Antonio Ramirez, Bernarda Martinez, Gloria Soto, Cristina Macedo, Anita Kelleher, Irma Torres, Maritza Perez, Valeria Diego, Elisa Gonzalez, and Suzanne Phelan. In Press. "Mi Gente, Nuestra Salud: Protocol for a People's Movement for Health Ownership." Progress in Community Health Partnerships. Preprint. Access Online.

collaborative and community-based evaluation methods.⁸ As defined by Indigenous scholars, decolonial paradigms are distinct in their utility to address dynamics that are specific to efforts led by and for Indigenous peoples.⁹ For use with other populations, including those with both Indigenous and non-Indigenous communities, decolonial-inspired research or disciplinary-specific approaches to community-academic partnerships may be warranted.¹⁰

Some key components of the decolonial approach to this study include:

- Collaborative knowledge generation with affected Mexican Indigenous community members and community leaders.
- Centering Mexican Indigenous peoples, Indigenous perspectives, and Indigenous ways
 of knowing in decision-making about study design and analysis.
- Active contributions to efforts, organizations, and individuals who are working to address the health disparities identified in the study findings.
- Prioritizing Spanish and Indigenous language accessibility for the most affected individuals, including having live in-person, video, and/or telephonic interpretation available when needed.
- Sharing data with relevant stakeholders, Indigenous leaders, and the public.
- Adapting and changing study methods, plans, and expectations to ensure mutual benefit and cultural continuity in the process.
- Incorporating a Community Advisory Board (CAB) that reflects diverse perspectives from Mexican Indigenous communities in the study along with relevant institutional stakeholders.

This study is a model for groups interested in conducting a demographics and health needs assessment among Mexican Indigenous groups and other historically underserved, marginalized, and racially excluded populations who are often relegated to the term "hard-to-reach" groups.

⁸ Bade, B. and K. Martinez "Full Circle: The Method of Collaborative Anthropology for Regional and Transnational Research," in *Migration and Health: A Research Methods Handbook*, Marc Shenker and Xochitl Castañeda Eds. University of California Press; Maxwell, Annette E., Sandra Young, Roena Rabelo Vega, Alison K. Herrmann, Cha See, Beth A. Glenn, Ritesh Mistry, Roshan Bastani. "Training Mixtec pomotores to assess health concerns in their community: A CBPR pilot study." *Journal of Immigrant and Minority Health*. <u>Access Online</u>.

⁹ Tuck, Eve, and K. Wayne Yang. "Decolonization Is Not a Metaphor." *Decolonization: Indigeneity, Education & Society* 1, no. 1 (2012).

¹⁰ Espinoza-Kulick, Mario Alberto Viveros. "Movement Pandemic Adaptability: Health Inequity and Advocacy among Latinx Immigrant and Indigenous Peoples." *International Journal of Environmental Research and Public Health* 19, no. 15 (2022): 8981. <u>Access Online</u>

Process

Development

This initiative brought together a multidisciplinary team consisting of individuals from MICOP, Diringer and Associates, California State University, San Marcos, Cuesta College, QueerProfs, and SLOPHD. The collaboration aimed to leverage the collective expertise of these organizations to address critical issues related to Mexican Indigenous migrants and farmworkers in the area.



Figure 2. Study Team Members

Figure 2 shows study team members: Celeste Gregorio-Martinez, Ana Huynh, Joel Diringer, Dr. Bonnie Bade, Susana Arce, Genevieve Flores-Haro, Dr. Alex Espinoza-Kulick, Silvano Vazquez, and Dr. Mario Alberto Viveros Espinoza-Kulick.

The project commenced with an analysis of existing data and knowledge, drawing upon institutional insights from MICOP,

community perspectives, existing reports, past studies, and various datasets, including the U.S. Census. This comprehensive review served as the foundation for the subsequent steps in the process.

The project included a Community Advisory Committee (CAC) to support the study's relevance and effectiveness. The CAC actively contributed to the co-creation of the survey instrument, collaborating with team members, and providing valuable input. Survey interviewers and MICOP staff contributed to editing and streamlining survey questions to be understood clearly by the respondents. The team included metrics identified by the SLOPHD related to the demographics and enumeration of Mexican Indigenous communities. An Institutional Review Board (IRB) approval was received from California State University, San Macros, ensuring ethical and procedural compliance with institutional norms throughout the process.

Following the decolonial framework identified above, the process was underpinned by a continuous commitment to community building, fostering connections, and building trust within the Mexican Indigenous communities who make up this study.

Data Collection

The data collection process began with an analysis of sending communities in Mexico, which relied on the combined insights of MICOP team members and the Community Advisory Committee (CAC). Drawing upon their knowledge and expertise, a preliminary list of hometowns in Mexico was identified, further complemented by statewide data collected among farmworkers that included San Luis Obispo County. This preliminary list served as a crucial guide in the subsequent stages of the project. The process helped to build trust and establish norms for collaboration and communication.

In the pursuit of a comprehensive sampling strategy, Census data was used to identify tracts, cities, and regions where Latinx and Hispanic communities are more prevalent in San Luis Obispo County. This data-driven approach allowed the team to prioritize in-person recruitment efforts within these specific geographic areas: Paso Robles, Atascadero, San Miguel, Shandon, Nipomo, and Oceano.

Participant recruitment efforts were carried out by trained MICOP bi-lingual and tri-lingual Mixtec-speaking interviewers with support from the full team. The process included multi-hour trainings along with regular weekly meetings, where the entire project team convened to review progress, assess the number of surveys completed, evaluate the distribution of efforts across the County, scrutinize the quality of interviews, and address any emerging questions or areas of confusion.

Advertising strategies were strategically crafted to ensure data quality. Recruitment of participants relied on word-of-mouth, personal invitations, and coordinated scheduling. Figure 3 shows a flyer that was used to notify community members about the survey. Most interviews were conducted at the MICOP office in Paso Robles, California, which is an emerging site of community gathering and trust. In addition, interviewers traveled to other locations in the County to recruit participants and conduct interviews. This included partnering with staff and leaders from MICOP's office in Santa Maria, which is closely tied to stakeholders in the northern Santa Barbara County and southern San Luis Obispo County region. Incentives in the form of \$50 gift cards were provided to all participants as a gesture of appreciation for their time and contribution.

Eligibility criteria for participants included being an adult living or working in San Luis Obispo



Figure 3. Recruitment Flyer

County and identifying as a member of a Mesoamerican Indigenous community. Only one person per household was eligible to participate and all participants reported living in the County.

Interviews of the 325 respondents were conducted between April through August 2023. Notably, this reflects the agricultural working season, and some health and occupational information that is affected by seasonal variation and workplace exposure may be distinct to this timeframe. It may have limited availability for participation in the assessment. Longitudinal data would be most useful for comparing trends over time.

To maximize accessibility and data consistency, interviewers were equipped with both digital and paper survey modalities with data being entered in Qualtrics. This approach accommodated participants' preferences and ensured an inclusive data collection process. The team was flexible and responsive, adjusting individual questions and response categories based on feedback from community members. Continuous collaboration between the team and the data analyst ensured a real-time understanding of survey outcomes.

Analysis

The analytic approach aims to generate clear and useful insights from the collected data, facilitating a nuanced understanding of participants' experiences and perspectives. The analysis process was guided by a commitment to addressing the concerns, needs, and questions raised by the participants, in close collaboration with the MICOP team and the Community Advisory Committee, ensuring that the study remained responsive to the community's priorities.

Preliminary reports were produced in both Spanish and English and were shared in Mixteco, Spanish, and English through multiple channels, including but not limited to a community event, television news, English-, Spanish- and Indigenous-language radio, social media, and online platforms. This strategy helped to generate community-level conversations about these topics and guide the further analysis of findings.

Missing data is excluded listwise for each analysis. No data had missing respondents greater than 10% of the sample.

Limitations

As with any project, this study has limitations that are specific to the form and content of the methodological process. As this was a cross-sectional survey, we are limited to associational analyses, which are guided by theoretical and conceptual interpretation. We are not able to assess changes over time or provide direct evidence for causality based on the data alone.

Furthermore, while steps were taken to ensure that our sample is representative of the population of interest for this assessment, Latinx Indigenous individuals residing in San Luis Obispo County, this cannot be directly generalized to the larger community or to statewide estimates.

Related to this, self-identification as Indigenous is affected by many dynamic factors. There may be individuals not represented in this study who practice Indigenous traditions and cultures but do not necessarily self-identify as Indigenous or speak an Indigenous language. These individuals likely have distinct factors that impact health and wellbeing which are outside of the scope of this assessment.

Snowball sampling is an effective strategy for studying such a population, but it can increase the number of participants within the sampling frame that are similar to the initial contacts for the study. In this case, that includes farmworkers living in and around the North County region of San Luis Obispo. Although outside sources help verify the overall validity of our study compared to existing demographic measures, we acknowledge the need to adjust some estimates related to the ratio of farmworkers when considering the larger population of interest.

Future investigation into this topic would benefit from engaging in systematic comparisons of existing and new data sources, noting the context under which estimates are produced.

The study is limited by the broader social and cultural dynamics that we describe, including mistrust between community members and institutional figures. While we took substantial steps to address these limitations using the decolonial framework, there are still individuals and communities who may not be reached or whose perspectives may not be fully represented in our data.

As noted above, data collection took place during the agricultural growing season, and thus our findings may not reflect conditions and experiences during the off-season. It may have limited the ability of community members to participate in the survey.

Finally, as with any novel study, this survey data alone cannot accomplish the important task of replication. It will be important for future studies to focus on the Mexican Indigenous population in San Luis Obispo and other counties to verify and further uncover relevant social, economic, and physiological dynamics at play.

Findings

Population Estimate

Based on our study and other studies and data sets, we estimate that there are between 3,430 and 8,000 Mexican Indigenous individuals, including children and adults in San Luis Obispo County.

We arrived at this estimate based upon the following estimates. More detail is provided below in Appendix A.

- Our study interviewed 325 Indigenous immigrant people, which represent at least 2,007 individuals, including their children. 95 percent of the adults reported working in the agricultural industry. We did not interview all Mexican Indigenous households.
- Given a range of data estimates and their limitations, we estimate that there are 9,000 to 15,000 farmworkers in the county in 2024.
- We estimate that 10-14 percent of farmworkers, or 900 to 2,100, are Mexican Indigenous.
- Adjusting for non-farmworker working Mexican Indigenous adults, we estimate that there are 945 to 2,205 working Mexican Indigenous adults.
- Adjusting for multiple workers in a household, we estimate that there are 490 to 1,142 Mexican Indigenous households in the county.
- Using our study findings of seven members per household, we estimate that there are between 3,430 and 8,000 Mexican indigenous persons in San Luis Obispo County.

Demographics

Age, Race, and Gender

The Mexican Indigenous workers we interviewed in San Luis Obispo County are relatively young. The average age of adult respondents is 29 years old and ranged from 18 to 83. This is about 12 years younger than the median age of the County, according to the most recent Census data.¹¹

When asked to self-identify using U.S. Census categories, nearly all respondents identified as Native American or Indigenous (97%), and some respondents indicated mixed African and Indigenous descent (1%). More of the respondents were women (58%) than men (42%). Two identified as "dos espiritus" (Two-Spirit).¹²

Current Residence and Hometown

The immigrant Indigenous population we interviewed in San Luis Obispo County is composed of predominantly farmworker families, with the majority residing in the northern portion of the County (82%), including Paso Robles (53%), San Miguel (23%), Atascadero (3%), Shandon (2%), and Templeton (1%). The respondents from the southern half of the County (18%) included those from Nipomo (13%) and Arroyo Grande (4%).

¹¹ U.S. Census 2020. Census Reporter. Access Online

¹² The following definition was provided in Spanish for the interviewers and participants to share when asking about gender identity. This was discussed and interpreted to Mixteco for interviewees who did not speak Spanish or English. "The term two-spirit defines a type of gender identity. Someone who has two spirits will simultaneously embody both feminine and masculine spirits OR a balance of feminine and masculine characteristics. Two-Spirit can be used to describe someone who fulfills both gender roles within a family or community. The concept of a two-spirit gender identity originated in Native American culture."

Figure 4 shows the number of respondents who reported their first arrival to SLO County by each year, from 1998 to 2022. Note that data was collected during 2023, so data is incomplete for this year and follow-up study is needed to document further trends.

Most respondents (60%) had arrived in San Luis Obispo County within the past four years (2020-2023), and the average length of time lived in the County was 3.8 years. The earliest reported arrival to SLO County was 1998, and the most recent arrival was within the previous month of taking the survey. Residents in North County reported being in the County for 3.6 years, while residents living in South County reported having lived in the county an average of 4.9 years.

Most respondents were from Guerrero (82%), including one percent of respondents who reported being from both Guerrero and Oaxaca. In addition, 16 percent of the sample was from Oaxaca (only) and less than one percent each were from other places: Michoacán, Jalisco, Baja California, and Monagas. The population represented 107 different hometowns (pueblos) and

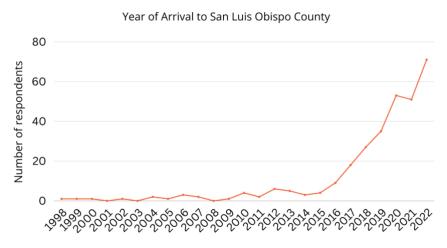


Figure 4. Year of Arrival to San Luis Obispo County

38 different municipal cities (municipios). The most common sending communities were: Cochoapa el Grande, Guerrero (111), San Martín Peras, Oaxaca (26), Metlatonoc, Guerrero (20), and San Lucas, Guerrero (11). The full list of municipios and pueblos can be seen in the Appendix, which are separated by states in Mexico. You can find a live map on Google My Maps.

Note that when asked to report their municipio, many reported the same name as their pueblo (e.g., Cochoapa el Grande). This reflects when larger pueblos are the central and named location of a region, not unlike the City and County of San Luis Obispo.

In addition to most respondents being from Oaxaca and Guerrero, participants reported being from other places in Mexico, including Zapotiltij (pueblo) in Jalisco (municipio/state), Lazaro Cardenas (pueblo/municipio) and Alvaro Obregon (pueblo/municipio) in Michoacán (state), and San Quintín (pueblo) in Vicente Guerrero (municipio), Baja California (state). As well, one participant indicated that they were from Maturin (pueblo/municipio) in Venezuela. We note that importance of recognizing a broader Latinx Indigenous migrant community, while

recognizing that the findings of this study suggest that the community of central interest in terms of population size are Mexican Indigenous communities.

When compared to their current residence, there were some clear patterns evident in the sending communities for different regions of SLO County. Specifically, participants who reported their sending city (municipio) as Cochoapa el Grande, Guerrero migrated to locations in North County (Paso Robles, Atascadero, San Miguel, Shandon, and Templeton). In addition, individuals who reported being from San Martín Peras (municipio in Oaxaca) all migrated to locations in South County (Nipomo and Arroyo Grande). You can find a full list of sending municipios organized by participants' current residence in Appendix B.

Language

Most of the survey participants reported speaking Mixteco at home (73%) or Mixteco and Spanish (15%). Other individuals reported speaking only Spanish at home (7%), or one of the following languages: Tlapaneco (2%) or Spanish and Tlapaneco (<1%), Amuzgo (<1%) or Spanish and Amuzgo (<1%), Triqui (<1%) or Spanish and Triqui (<1%). In addition, we asked individuals what language(s) they feel comfortable speaking, listening, and reading and writing. This information is summarized in the following table.

				Read and
Language	Use at Home	Speak	Understand	Write
Mixteco	73%	58%	36%	0%
Spanish and Mixteco	15%	27%	42%	13%
Spanish	7%	10%	19%	62%
Amuzgo	<1%	<1%	<1%	<1%
Spanish and Amuzgo	<1%	<1%	<1%	0%
Tlapaneco	2%	2%	<1%	0%
Spanish and Tlapaneco	<1%	2%	<1%	<1%
Triqui	<1%	0%	<1%	0%
Spanish and Triqui	<1%	<1%	<1%	0%
Spanish and Nahuatl	0%	<1%	0%	0%
None	0%	0%	0%	20%

Notably, Mixteco was the dominant language, with most feeling comfortable at home, speaking, and understanding Mixteco. Many community members have developed mastery of Spanish in speaking (37%), understanding (61%), and reading and writing (75%). Of significance is that 20 percent reported being unable to read or write in any language.

Education

This community has had limited access to education, with some reporting no formal educational attainment (21%) or only grade school (44%). About a quarter of respondents had completed middle school (25%), and only one in ten had completed high school (10%). These data reflect the lack of access to secondary schools in pueblos in rural Mexico. Most rural

pueblos do not have secondary schools and families must send their children to larger cities and pay for secondary school, food, and lodging for their children, which is prohibitive for most. By contrast, in the total population of San Luis Obispo County, approximately 92% of adults were a high school graduate, had a GED, or higher.¹³

Women and men had similar levels of educational achievement; however, women were more likely to have received no formal education at all (25%) compared to men (16%), and less likely to have completed only grade school (40%) compared to men (49%). These numbers are summarized in the following table.

Education	Full Sample	Men	Women
No Education	21%	16%	25%
Elementary School	44%	49%	40%
Middle School	25%	25%	25%
High School	10%	10%	10%

Overcrowded Housing and Access to Quality Water

Housing Type

There were important patterns related to housing and economic conditions in this community. Only one respondent reported being homeless or unhoused, but overcrowding and dangerous living conditions were common in this sample. The most prevalent forms of housing were living in a shared home with another family (27%), living in a trailer or mobile home (23%), apartment (20%), or a rented room. The full list of housing types is included in the table below.

The average household size was seven, ranging from 1 to 15. Most individuals live with a spouse/partner (63%) and live with children under the age of 18 (65%). Of those living with children, there was an average of over two children per household and 87 percent reported having at least one child under the age of five.

Living with extended families was somewhat common, with 21 percent living with siblings, eight percent living with adult children, four percent living with their parents, one percent living with grandchildren, and 30 percent living with other family members.

Families are bearing the burden of scarce access to affordable housing. Overcrowding is apparent with respondents living in housing arrangements with up to 14 other people, and, on average, shared with a household of seven people in two bedrooms. In the most extreme situation, 11 persons share a single bedroom. Participants reported an average of about two bedrooms in their home. This ranged from one bedroom to six bedrooms. Adjusted for the size

¹³ U.S. Census. 2022. "Quick Facts: San Luis Obispo County." Washington, DC. Access Online

of the household, families in the study reported an average of 3 individuals per bedroom in the household, with a range of 1-11 people per bedroom.

Housing type	%
Shared house	27%
Trailer / mobile home	23%
Apartment	20%
Room in an apartment	19%
Separate house	7%
Studio	2%
Living room	1%
Dormitory	1%
On-site employer-provided housing	<1%
Garage	<1%
Hotel or motel	<1%

For context, the Census Bureau defines severe overcrowding as any living situation that exceeds an average of 1.5 persons per room. ¹⁴ Some of the documented health risks of overcrowding include stress, depression, anxiety, poor sleep quality, and decreased hygiene. ¹⁵ This increases the risk of contracting communicable diseases, including COVID-19. ¹⁶

Water and Sanitation

Two-thirds (67%) reported having one bathroom in their home; thirty-two percent reported having two bathrooms. Only one reported no bathroom in their home. Nearly all (94%) reported having hot and cold running water, a bathroom and a bath or shower. Nearly all (96%) had access to full kitchens (stove, refrigerator, running water).

However, water quality and trust in public services remains an issue. One in three interviewees (34%) reported problems with their domestic water. Nearly a third (30%) reported a bad smell, 17 percent reported a bad taste of the water, and 5 percent reported water with a bad color.

Water issues were most reported by respondents in Templeton (66%) and Shandon (50%). In addition, water problems reported by respondents were more common in North County: San Miguel (39%), Paso Robles (37%), and Atascadero (36%) than in South County: Nipomo (21%) and Arroyo Grande (14%). These numbers are disturbing, and warrant follow-up investigation. The sample sizes in some of the areas were small but could indicate larger problems.

¹⁴ https://www.census.gov/data/tables/time-series/dec/coh-crowding.html

¹⁵ World Health Organization. 2022. "World Report on the Health of Refugees and Migrants." Geneva: Author. Access Online

¹⁶ Varshney K, Glodjo T, Adalbert J. Overcrowded housing increases risk for COVID-19 mortality: an ecological study. BMC Res Notes. 2022 Apr 5;15(1):126. doi: 10.1186/s13104-022-06015-1. PMID: 35382869; PMCID: PMC8981184. Access Online

Figure 5 indicates the location of Census tracts which indicated higher degrees of water problems compared to other locations. You can find a live map on <u>Google My Maps</u>, which shows the specific form of reported problems that is summarized in the Appendix C.

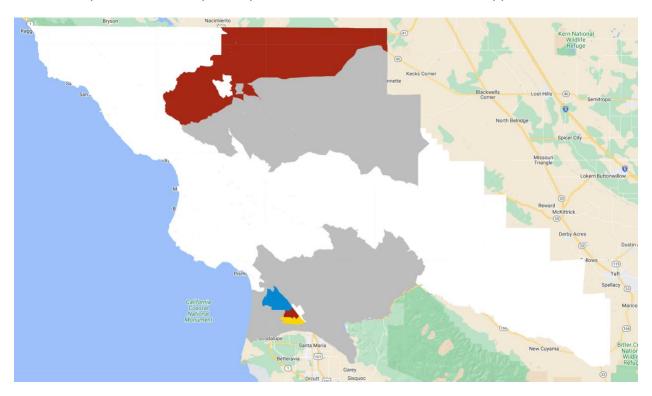


Figure 5. Prevalence of reported water problems by Census tract

In the chart, blue indicates a tract where there were no reported water problems (0%), yellow reflects tracts where 1-25% of the surveyed Mexican Indigenous population reported problems with the water, and red indicates Census tracts where more than 25% of the sample indicated a problem with the water. Gray tracts are those where there were survey respondents, but too few for meaningful analysis (six or fewer), and white tracts indicate those where no Mexican Indigenous survey respondents were identified. You can find more details on each tract in Appendix C.

Even though most respondents indicated access to clean and good-quality water, nearly three-quarters of the sample (73%) relied on purchased bottled water for day-to-day consumption and use. A range of explanations may contribute to this phenomenon, and given the scope of the pattern, there are likely multiple reinforcing motivations for this behavior, including ease of access, trust in the quality, and cultural norms or belief systems about water. Additional investigation would be useful to understand the use of bottled water and effective intervention pathways to changing this community norm.

A healthy adult should consume about one gallon of water per day,¹⁷ and those needs increase for individuals completing heavy exertion and spending time in the heat, including working outside in the fields. Estimated across the sample for the entire Mexican Indigenous population, this means that the community is purchasing about 1.5 to 3 million gallons of water each year, leading to both increased cost and a greater impact on the environment by using individual plastic water bottles and/or reusable water jugs.

Limited Economic Resources

Limited financial resources create barriers and challenges for the Mexican Indigenous community living in San Luis Obispo County. Most respondents are farmworkers, with 95 percent of participants indicating working in the fields. At the time of the interviews, those individuals reported working in either grapes (81%) or strawberry (17%) fields. This ratio is shown in Figure 6.

All participants who worked in grapes were in North County, and all participants who worked in

strawberries were in South County. In addition, among those with spouses, 88 percent of spouses/partners are employed in farm work. Given the unspecific and uncertain hours associated with farm work, dual parents working in the same industry may create distinct challenges for childcare and other health needs.

In addition to working in the fields, participants reported a range of employment. Some individuals held multiple jobs, including farm work and working in a winery (2%), farm work and construction (1%), farm work and food service (<1%), or farm work and cleaning (<1%). In addition, some participants work cleaning (2%) or in construction (<1%). Three percent of respondents were unemployed.

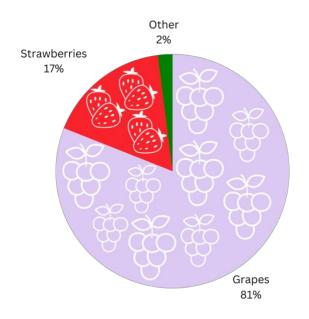


Figure 6. Farm work by Crop

Interviewees were asked about their family income, i.e., incomes for those persons for whom they were financially responsible. This helps to ensure accuracy, because it only includes those individuals with shared financial responsibilities and resources. It is important to recognize that

¹⁷ Report Sets Dietary Intake Levels for Water, Salt, and Potassium To Maintain Health and Reduce Chronic Disease Risk | National Academies

this may not include all individuals within a household, depending on a family's living situation. Family incomes for most (82%) are below \$2,500 per month, with an additional 14 percent reporting monthly incomes between \$2,501 and \$3,000. In San Luis Obispo County, the cost of living for a family of four is \$8,183/month. This means that most household are earning less than enough to support one individual. These funds are being stretched to support families as large as 15 individuals.

Major Health Issues

Respondents shared a range of perspectives, experiences, and information related to their health as well as the well-being of their families and communities. Notably, when asked about their overall health, only 11 percent reported their health being negative. However, only 12 percent indicated a positive evaluation of health as well. The largest response category was neutral (75%) and nine percent reported that they didn't know their overall health, or that it doesn't apply to them.

Health Insurance

As documented in studies done across California over the last few decades, farmworkers in San Luis Obispo County do not have health insurance. ¹⁹ The data show that nearly all (85%) said that they did not have health insurance. By contrast, only 6.5 percent of persons under 65 in the total population of San Luis Obispo County do not have health insurance. ²⁰

One notable finding was that when asked a follow-up question about their access to Medi-Cal and other services, 6 percent of respondents in the sample who indicated that they did not have health insurance indicated that they have full-scope Medi-Cal, suggesting some confusion over the recognition of Medi-Cal as health insurance. Among the respondents who knew that they had health insurance, these were employer-provided plans (15% of the full sample).

¹⁸ United Way. 2023. The Real Cost Measure in California 2023. United Ways of California. Access Online

¹⁹ ITUP. 2023. Expanding Health Coverage for California Farmworkers. Access Online; Brown, Paul, Edward Flores, and Ana Padilla. 2022. "Farmworker Health in California: Health in a Time of Contagion Drought, and Climate Change." University of California, Merced. Access Online; Diringer, J., Health in the Heartland: The Crisis Continues A Report on Health Status and Access to Care in the San Joaquin Valley, Central Valley Health Policy Institute, CSUF, 2004; Villarejo, D., B. Bade, D. Lighthall, D. Williams, A. Souter, R. Mines, S. Samuels, and S. McCurdy, "Access to Health Care for California's Hired Farm Workers: A Baseline Report." California Program on Access to Care, California Policy Research Center, University of California Office of the President. 2001; Villarejo, D., B. Bade, D. Lighthall, D. Williams, A Souter, R. Mines, S. Samuels, and S. McCurdy. "Suffering in Silence: A Report on the Health of California's Agricultural Workers" The California Endowment, 2000; Diringer, J. Paradox in Paradise: Hidden Health Inequities on California's Central Coast, Diringer and Associates, 2006; Maxwell, Annette, Sandra Young, Catherine M. Crespi, Roena Rabelo Vega, Reggie T Cayetnao, and Roshan Bastani. "Social determinants of health in the Mixtec and Zapotec community in Ventura County, California." International Journal of Equity in Health. Access Online.

²⁰ U.S. Census. 2022. Quick Facts: San Luis Obispo County. Washington, DC: Author. Access Online

The state of California has expanded Medi-Cal to cover undocumented adults, starting with children, seniors, and young adults. In January 2024, this expansion includes income-eligible adults of ages 26 through 49 to qualify for full-scope Medi-Cal, regardless of immigration status. Community members will need to be provided with updates and heath navigation on how and where to enroll in Medi-Cal. Many of the interviewees (47%) have at least one family member who is utilizing full-scope Medi-Cal, presumably children and young adults. Some individuals have used restricted scope Medi-Cal for emergencies (20%) and pregnancy related care (25%). No participants indicated having privately purchased health insurance, such as those available in the state's healthcare exchange, Covered California.

Health and Hunger Challenges

Hunger is a key health issue reported among Mexican Indigenous farmworker families, with nearly two-thirds (64%) of the respondents saying that they or other members of their family did not have sufficient money to buy food within the past 12 months. These numbers are consistent with the 2021 COVID-19 Farmworker Study (COFS) in which 65 percent of participants reported hardships to pay for food²² and the UC Merced Farmworker Health Study, where 42 percent reported low or very low food security.²³ Physical health conditions affect large segments of the community, contributing to missed work or school, especially headaches (31%), and dental problems (27%). Headaches indicate many potential causes, like environmental/chemical exposure and undernutrition.

Symptom	Experienced Symptom	Missed Work
Headaches	31%	80%
Fever	19%	100%
Eye problems	17%	39%
Numb hands or feet	17%	19%
Dizziness	15%	30%
Stomach problems	15%	52%
Watery eyes	14%	38%
Difficulty sleeping	14%	6%
Diarrhea	13%	20%
Hives	8%	8%
Difficulty breathing	6%	5%
Seizures	2%	17%

²¹ California Department of Health Care Services. 2023. "Ages 26 through 49 Adult Full Scope Medi-Cal Expansion." Access Online and Access in Spanish Online.

²² COFS Collaborative Project "Experts in their Field: Contributions and Realities of Indigenous Campesinos During the COVID-19 Pandemic," California Institute for Rural Studies, 2021.

²³ Brown, Paul, Edward Flores, and Ana Padilla. 2022. "Farmworker Health in California: Health in a Time of Contagion Drought, and Climate Change." University of California, Merced. <u>Access Online</u>

Among those who reported the health conditions in the table, it was common for an individual to miss work because of these symptoms (80% of headache sufferers and 60% of people with dental problems). Fever was a commonly reported health condition and all of those (100%) who had a fever did not go to work because of it.

The reported dental conditions of broken and missing teeth, cavities, and gum problems reflect low to no access to dental services. Findings are consistent with previous state-wide studies with farmworkers ²⁴ Dental problems correlate with chronic health conditions including heart disease, diabetes, respiratory ailments, and Alzheimer's.²⁵

Symptom	Experienced Symptom	Missed Work
Broken teeth	27%	19%
Missing teeth	23%	25%
Cavities	23%	1%
Gum problems	19%	16%
Toothache	18%	60%

Mexican Indigenous farmworkers in San Luis Obispo County report suffering from mental and emotional distress: especially stress (estrés, 40%), sadness (tristeza, 36%), and anger (coraje, 25%). However, it was uncommon for individuals to report having missed any work time for their mental and emotional wellness. Previous studies on ethnospecific illnesses such as susto (fright illness) with 49 percent of 106 women participants reporting, coraje (36%), and nervios (41%), show similar patterns of the emotional impacts of farmworker living and working conditions and economic stress²⁶.

When asked about their experiences with discrimination in the past 12 months, the majority stated that they had not experienced any discrimination (54%). Among those who did, the most

²⁴ Villarejo, D., B. Bade, D. Lighthall, D. Williams, A Souter, R. Mines, S. Samuels, and S. McCurdy. "Suffering in Silence: A Report on the Health of California's Agricultural Workers" The California Endowment, 2000; Villarejo D, McCurdy SA, Bade B, Samuels S, Lighthall D, Williams D, 3rd. The health of California's immigrant hired farmworkers. Am J Ind Med. 2010;53(4):387-397.

²⁵ Villarejo et al. 2000; Villarejo et al. 2010

²⁶ Bade, B. "La practica de la medicina transcultural de los migrantes mixtecos en California," *La ruta mixteca: el* impacto etno-politico de la migracion transnacional en las poblaciones indigenas de Mexico, Stefano Varese, ed. Mexico: Consejo Nacional para la Cultura y las Artes, 2005; Bade, B. "Vida y salud: trabajo agrícola, enfermedad y alternativas a la biomedicina entre las familias mixtecas migrantes en California." Indígenas mexicanos migrantes en los Estados Unidos, Mexico City: Editorial Miguel Angel Porrúa/Universidad Autónoma de Zacatecas, 2004; Bade, B. "Alternativas a la Medicina Clínica Empleadas por los Mixtecos Migrantes en California" Moreno Yánez and Douglas Sharon eds. Pontificia Universidad Católica del Ecuador: 49 Congreso Internacional de las Americanistas, 1997; Bade, B. Sweatbaths, Sacrifice and Surgery: The Transmedical Health Care of Mixtec Migrant Families in California, Doctoral Dissertation, Riverside: University of California, 1994.

common experience was discrimination based on being Indigenous (22%), immigration status (14%), and race/ethnicity (4%).

Community Health Priorities

Health conditions related to environmental exposure in farm work dominate the health issues that most concern Mexican Indigenous communities in San Luis Obispo County. When asked about what health issues affect their communities, participants' top concerns were excessive heat (76%), natural disasters (69%), workplace health (53%), and nutrition (44%).

Health Concerns	Percentage
Excessive heat	76%
Natural disasters	69%
Workplace health risks	53%
Nutrition	44%
Pesticide exposure	38%
Children's health	38%
Exposure to smoke	34%
Vaccines	32%
Dental health	29%
Mental health	6%
Diabetes	5%
Eating disorders	3%
Spiritual health	3%
Cancer screening	2%
HIV and sexually transmitted infections	1%
Abuse	1%
Physical activity and exercise	1%
Health	1%
Access to healthcare	<1%
Cancer treatment	<1%

Access to Health Services

Consistent with data recorded across California in the California Agricultural Workers Health Survey (2000) farmworker health study, and the UC Merced Farmworker Health Study (2022) barriers to health care, especially primary care, continue to be a key concern for Mexican Indigenous workers.²⁷ Less than half of participants in the study had ever had a routine physical

²⁷ Villarejo, D., B. Bade, D. Lighthall, D. Williams, A Souter, R. Mines, S. Samuels, and S. McCurdy. "Suffering in Silence: A Report on the Health of California's Agricultural Workers" The California Endowment, 2000.

exam (46%); only a third had a dental exam (35%), and fewer than one in six had ever had an eye exam (16%) in their lifetime.

In the past two years, interviewees said that someone in their family had used the following services: Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). (49%), Medi-Cal (47%), or CalFresh (SNAP, Food Stamps) (28%). Thirty percent said that had not used any services. The use of WIC as an important source of health support, particularly in the form of nutrition, is consistent with the birthing age of participants in the study and the number of young children that they reported. Notable are the roles of both WIC and CalFresh to supplement household food supplies, since respondents reported an inability to pay for sufficient food.

Among the 47 percent of participants who reported having at least one family member on Medi-Cal, 20 percent report that this was restricted scope Medi-Cal for emergency conditions, and 25 percent report using pregnancy-related Medi-Cal.

Participants who reported using western clinical care (88%), were most likely to use Community Health Centers (CHC) (30%), a pharmacy (22%), or the hospital (14%) for their area. Individuals were less likely to use an emergency room (9%), traditional health provider (*curandero*, 8%), or a private doctor (4%) when ill.

Families rely heavily on traditional medical concepts, practices and practitioners to meet health care needs ²⁸. The data show that 65 percent of community members continue to invest in positive health through health care visits with traditional healers, even when they do not feel sick. While curanderos were not commonly used as a primary mode of healthcare to treat illnesses, they are clearly an important part of the overall well-being of this community.

There are multiple different kinds of traditional healers, and respondents indicated visiting curanderos (traditional healers, 21% of the full sample), espiritualistas (spiritual healers, 22%), sobadores (musculoskeletal ailments/body workers, 13%), yerberos (medicinal plant specialists/herbalist, 5%), and hueseros (bone and joint alignment, 5%).

Barriers to Care

Access to health care for Mexican Indigenous communities living and working in California has long been fraught with prohibitive barriers, as is shown in the studies cited in the introduction. Virtually all respondents (>99%) indicated that they had not been able to access healthcare at

²⁸ Bade, B. "Vida y salud: trabajo agrícola, enfermedad y alternativas a la biomedicina entre las familias mixtecas migrantes en California." *Indígenas mexicanos migrantes en los Estados Unidos*, Mexico City: Editorial Miguel Angel Porrúa/Universidad Autónoma de Zacatecas, 2004; Bade, B. "Alternativas a la Medicina Clínica Empleadas por los Mixtecos Migrantes en California" Moreno Yánez and Douglas Sharon eds. Pontificia Universidad Católica del Ecuador: 49 Congreso Internacional de las Americanistas, 1997; Bade, B. *Sweatbaths, Sacrifice and Surgery: The Transmedical Health Care of Mixtec Migrant Families in California*, Doctoral Dissertation, Riverside: University of California, 1994.

some point while living in San Luis Obispo County. The most common reasons cited were transportation (48%) and distance to services (33%), cost of services (48%), and language barriers (42%). Further barriers include service provider issues, and fear or uncertainty.

The full list of barriers to care is included in the following table.

Barriers to Care	Percentage
Transportation	48%
Services too expensive	48%
Language barriers to make an appointment	42%
Provider does not speak my language	38%
Don't have health insurance	37%
Wait times are too long	34%
Providers are too far	33%
Technological barriers to make an appointment	32%
Medical providers do not understand my health needs	31%
No appointments are available	30%
Conflict with the provider's available hours	25%
Unable to secure childcare	19%
Unable to get time off of work	16%
Interpretation services were not available	15%
Don't qualify	12%
Fear of immigration authority	9%
Migration status	9%
Fear of police	7%
Provider staff is disrespectful	4%
Never prevented from care in SLO	<1%

COVID-19

When considering these common barriers, it is unsurprising that participants had limited access to COVID-related care, including that only 55 percent had one or more doses of the COVID-19 vaccine and 36 percent had ever had a COVID test.

Among the participants who were vaccinated, the majority had only one shot of a two-shot sequence (55%). This means that only 30 percent of the total sample was fully vaccinated for COVID-19, including those that received a single dose Johnson and Johnson vaccine. Compared to the general population in San Luis Obispo County, at July 2023 the overall vaccination rate was 66 percent for any vaccines and 58 percent for a full vaccination, which was slightly higher

than the State rates of 65 percent and 57 percent.²⁹ This is substantially lower than comparable data in the nearby counties of Monterey and Tulare, which reported most farm workers being partially vaccinated (90%) and nearly all of those individuals being fully vaccinated (88%), and only ten percent being unvaccinated.³⁰

COVID-19 Experiences	Percentage
COVID-19 Partial Vaccine	55%
COVID-19 Full Vaccine	30%
COVID-19 Test	36%
Negative consequences at work related to COVID-19	10%
Tested positive for COVID-19	8%
Thought you had COVID-19	4%
Received treatment for COVID-19	2%

Notably, the rates of infection and treatment for COVID-19 are much lower than would be expected for the general population or for a marginalized group at risk for COVID-19, including Latinx farmworkers. It is important to interpret these findings in the context of the lack of access to health care facing this community, as well as the likelihood that young, generally healthy population of farm workers may be less likely to acknowledge a health problem.

Communication and Technology

Internet Access

Nearly all respondents (95%) reported having a cell phone, although only 70 percent said that they had regular access to internet.

Internet Access	Percentage
Cell phone	92.1%
Home WiFi	8.3%
Public WiFi	3.5%
Tablet	2.2%
Computer	0.4%

²⁹ Data - County of San Luis Obispo (ca.gov); COVID Vaccine Data (ca.gov)

³⁰ Mora AM, Kogut K, Sandhu NK, et al. SARS-CoV-2 infection and long COVID among California farmworkers. *J Rural Health*. 2023;1-11. https://doi.org/10.1111/jrh.12796

Among those who do have access to the Internet, smartphones were by far the most common form of access (92%). The full range of Internet access platforms is included in the following table.

Health Communication Preferences

When asked about how they wanted to be informed about health services and information, the most common answers were WhatsApp (66%) and text messages (66%). Participants indicated benefiting from flyers (51%) and social media posts in Spanish (47%) and Indigenous languages (40%). The full responses provided related to communication preferences are included in the following table.

How would you like to get information related to health?	Percentage
WhatsApp video or audio	66%
Text message	66%
Flyers	51%
Social media posts in Spanish	47%
Social media posts in an Indigenous language	40%
Radio announcements	29%
Announcements in an Indigenous language	26%
Announcements in Spanish	25%
Community events	22%
Provider appointment	22%
Educational talks at work	18%
Friends and family	12%
Community leaders	11%
Children's school	8%
Drawings with words and illustrations	7%
Website in Spanish or Indigenous language	5%
Meetings with community health workers	3%
Magazines	1%

Language Preferences

For health communications, nearly half of respondents (46%) preferred written health information in Spanish or in Spanish and an Indigenous language (24%). Notably, the variants of Mixteco and many other Indigenous languages are not traditionally written or literary in format and often utilize sounds, intonations, and other communicative meaning structures that are not rendered in the Latin alphabet. In more recent years, Indigenous scholars have introduced written formats for communicating in Mixteco, with which some of the respondents were familiar. However, as indicated by their preferences, many would prefer written Spanish even if they are not fully comfortable with the language in general, compared to reading in Mixteco.

A quarter of the sample would prefer written materials in an Indigenous language (25%). When asked which Indigenous language respondents preferred, they self-identified their preference. This list is included in the table below.

Language	Written	Oral
Mixteco	50%	53%
Mixteco de Guerrero	25%	25%
Mixteco de Cochoapa el Grande	18%	15%
Mixteco de Oaxaca	3%	3%
Tlapaneco	1%	1%
Mixteco Alta	<1%	0%
Mixteco de Tierra Blanquita	<1%	<1%
Mixteco de Metlatonoc	<1%	1%
Amuzgo	0%	<1%
Mixteco de Coicoyan	<1%	<1%

Recommendations

Meet the Moment to Ensure Medi-Cal Enrollment among Eligible Individuals

In January 2024, Medi-Cal removed all immigration requirements for eligibility. Given the low income of the Mexican Indigenous population, many will likely qualify for full-scope Medi-Cal, which provides coverage for medical, dental, vision, and behavioral health care, along with coverage for pharmacy prescriptions, transportation, health navigation, and other related services. However, there are many barriers between eligibility and enrollment, including mistrust of the medical system, language barriers to accessing services, along with the limited time and resources that are experienced by young, working families. Based on geographic trends, the priority for these efforts should be in Paso Robles and San Miguel.

An intentional effort by government agencies in coordination with trusted community-based organizations, such as MICOP, community health centers, clinics, and hospitals, can help to address these barriers. By providing information and direct enrollment services to Mexican Indigenous peoples in the locations where they already live, work, and shop can help to provide a community-level response to encouraging enrollment and building trust in social services systems. These efforts can not only support the community through the new eligibility, but

through a time of challenging transition due to the unwinding of the continuous coverage requirement that began in April 2023.³¹

Enrollment in Medi-Cal is the first step in improving access to medical services. Ensuring that Medi-Cal recipients are aware of how the access the broad range of services, and assisted in navigating the complex systems is critical. The Medi-Cal transportation benefit will be of great value to the Mexican Indigenous community since that was reported as biggest barrier to accessing care.

Address Language Barriers through Interpretation and Cultural Humility

Nearly four in 10 respondents indicated that language barriers impeded access to appointments and medical care due to the lack of information in Indigenous languages. All people have a right to healthcare in the language(s) they speak and understand with professional interpretation services. Interpretation services are essential in accessing services.

The SLOPHD has partnered with Herencia Indigena, a local Mixteco speaking medical interpretation service, to ensure that all health and social services providers are able to provide similar services.³² For healthcare providers, crisis centers, hospitals, and emergency rooms, it is crucial that these services are maintained and available on a 24/7 basis.

Implementing this culture shift means ensuring that Mexican Indigenous peoples are aware of their rights to an interpreter and provided with resources on how to request an interpreter, such as written cards that can be provided or a script that can be read over the phone to request interpretation from English or Spanish to an Indigenous language. A robust workforce of both clinical and non-clinical Indigenous language interpreters is needed so that agencies, community organizations, and healthcare providers can regularly access reliable interpretation in a variety of formats. Existing providers have demonstrated that these are viable service provision and business models. Finally, physicians, nurses, healthcare staff, and other social services workers need to be prepared and equipped to provide interpretation and navigate language barriers respectfully and with patience and cultural humility to ensure positive trust is built.

On a policy level, improvements to current non-discrimination and language access policies and health care language assistance services are necessary. SB 223 (2017-2018) is a California state law that imposes new requirements on health plans to provide language assistance services and

³¹ "Medi-Cal COVID-19 Public Health Emergency and Continuous Coverage Operational Unwinding Plan. Department of Health Care Services (DHCS)." <u>Access Online</u>

³² Uliasz, Alena and Vanessa Terán. "Not Everyone Speaks Spanish! The need for Indigenous language interpreters in California's Agricultural Workforce." *UC Davis Western Center for Agricultural Health and Safety*. <u>Access Online</u>; Uliasz, Alena Marie. *Voices of the Rain: Indigenous Language Justice in California*. University of California, Davis.

notices of consumer rights to people with limited English proficiency. It expands the categories of protected characteristics under state nondiscrimination law.

Increase Healthcare Capacity to Meet the Needs of Mexican Indigenous Peoples

Provider access is limited in many rural communities, which exacerbates the risks for excluded groups to access healthcare. Mobile clinic access, telehealth and transportation that already exist in the County can be expanded to ensure services to the Indigenous community by implementing them using practices of accessible interpretation, cultural awareness, and respect. Physicians and other healthcare providers with linguistic and cultural capacity to serve these communities can be leaders in this area.

The lack of access to dental care, vision care, and primary care is alarming. These services exist in San Luis Obispo County but are not reaching this population. Even without health insurance, including Medi-Cal, there are providers who would be able to provide services, if the community members were able to access them. In addition, with the expansion of Medi-Cal impacting community members in the coming months and years, there are additional opportunities for a larger range of providers to work with Mexican Indigenous communities to provide healthcare.

This community will benefit from greater collaboration between complementary practices of western medical care and Indigenous healing. This includes mutual learning between both sets of expertise. For example, curanderos and other traditional healers have created an ease of access and speed of results which is not accessible through clinical service providers, even when more intensive medical care may be beneficial for long-term health. When providing services, being able to provide same-day referrals to see a specialist and access a pharmacy could create a greater return on investment for community members. When an individual must take an entire day off work to go to the doctor, it can be prohibitive to have make multiple follow-up visits. Extended hours at health clinics could attend to those who can visit after work hours.

Navigating the western health system is difficult for an immigrant population with language, financial, and other bureaucratic barriers. The SLOPHD has recently funded a Mixteco-speaking health navigator on a pilot basis to be a leader in connecting community members with care. Several "promotores/as," community health workers, and interpreter services in Mixteco exist in the County. These programs need to be supported and fully funded to meet the basic needs of the Mixteco-speaking population.

Improve Food Access through Expanding Existing Services

Nearly two-thirds (64%) of the respondents said that they or other members of their family did not have sufficient money to buy food within the past 12 months. To help ameliorate the economic challenges of low wages and the high cost of housing, many organizations provide free food distributions. These services should be made accessible to and inclusive of Mexican

Indigenous peoples through concerted outreach efforts, adapting food offerings and the time and location of food deliveries to address the needs of the individuals and families who are living with hunger. These problems were most common in Shandon, Templeton, Paso Robles, Atascadero, and Nipomo. In collaboration with community leaders and organizations, community groups that provide these services can increase their impact and benefit.

Collaborate with Providers to Address Concerns about Drinking Water

Many respondents reported that the water was discolored, tasted bad, and smelled bad. Further, three-quarters (73%) of respondents said that they purchased bottled water for their domestic water needs, straining limited budgets and contributing to negative environmental impacts. The most common concerns were reported throughout North County, including Shandon, Templeton, San Miguel, and Paso Robles.

More work needs to be done to understand the extent of and the causes of the reticence to use domestic water. These efforts should include further discussions with the community and water agencies, water quality testing and remediations to identify where those issues are and how they can be addressed so that individuals have access to good quality water as a basic human necessity.

Further collaboration between government agencies that provide water and community stakeholders is needed to identify how to offset these costs and encourage a positive relationship between community members and the water they drink. This may include providing access to filtration systems and providing reusable water bottles in a similar size to plastic bottles, which can easily be transported to and from work.

Incorporate Overcrowding into Policies and Discussions on Housing

The high cost of housing affects most populations in SLO County, which has led to substantial concern about homelessness. Many immigrants cannot avail themselves of public or subsidized housing and are left to the private market of low-income housing with rent increases, evictions, and substandard housing. Among Mexican Indigenous communities, overcrowding is rampant, for example, with up to 11 persons sharing a single bedroom. However, only one person in the survey indicated that they were "homeless" or "unhoused." Current efforts in the County focusing on homelessness should expand to incorporate issues of overcrowding. While structural and long-term solutions are needed to provide additional low-income housing options, services can be provided to help offset the immediate stresses and strains created by overcrowding.

Promote, Develop, and Support Community Services for Immigrants

Accurate Information about available community services for immigrant populations and farmworkers is needed. Having assistance from persons with relevant lived experience, those who understand and can recognize cultural values and norms, and who speak the same language is critical to connecting people with services in a meaningful, mutually beneficial way.

Two specific areas of development are providing financial support for necessary resources and supporting the implementation of multilingual and multicultural services for families. First, with respect to financial support, both private and public resources are needed to address the service gaps in Mexican Indigenous communities. Public investment from local, state, and national resources are available through advocacy, allocation, and grant sources. Private entities which benefit from the labor of these communities, including agriculture, tourism, housing, and essential services, can support the health and well-being of Mexican Indigenous communities through philanthropic initiatives and engagement.

Many communities have benefitted from having a physical center where immigrants feel safe and welcomed. This includes government sponsored resource centers and independent community-based organizations, which provide distinct and complementary functions for community development. For the Mexican Indigenous population, including those who are not farmworkers, it is important to have readily available family-friendly services, especially in places like schools and healthcare settings, where community members are already present. These services are most effective when they are supported with language accessibility and recognize the strengths of multicultural, multilingual communities. Several efforts are underway in San Luis Obispo County to develop resource guides and physical spaces for immigrant populations, which should be fully supported and funded.

Beyond having these services, it is necessary to form connections based on active engagement and relationships between providers, community leaders, and community members. These structured initiatives provide ways to build trust. Live resource fairs in various locations with Spanish and Mixteco speakers will be helpful, especially during the early months of Medi-Cal enrollment and eligibility for undocumented adults ages 26 through 49. Timing these programs based on when farm working communities are available can lead to higher levels of engagement and participation.

Improve Health Communication and Education through Digital Technologies

The community assessment found that the Mexican Indigenous community is highly connected electronically through cell phones and prefers digital information through WhatsApp and text messaging. Health and social services providers should fully incorporate these services with Spanish and Mixteco language communications — written, video, and audio in working the

immigrant communities. Short, instructive videos have been shown to be effective in communicating with both verbal and visual content, including gestures and images.

The best practices for interpreting in Mixteco include using audio recordings, which can be provided through a variety of programs and formats, as well as using radio and live workshops that can be delivered in a primarily verbal format.³³ Modern software like Zoom, Google Drive, Microsoft Office, and Adobe Acrobat can be used to incorporate audio files into documents, presentations, links, and more. This overlaps substantially with work to ensure accessibility for people with disabilities, and there may be opportunities for collaboration and shared resource development with stakeholders in this domain.

Focus on Services for Young Children and Parents

The Mexican Indigenous population in San Luis Obispo County is mainly composed of recently arrived parents of young children. Two-thirds of respondents reporting living with children under the age of 18, and of those nearly all (87%) had at least one child under the age of five. The high participation in WIC and restricted scope Medi-Cal for pregnancy related care is indicative of the needs of this population. Efforts are needed to ensure that children receive appropriate preventive services, live in safe and healthy housing, have adequate nutrition, and receive the benefits of early childhood programs to promote child health and development. Parents need assistance in meeting the needs of their young children to live in nurturing and stable home environments. Questions have been raised about the adequacy of childcare since most children are in families where both parents work in agriculture.

Enhance Education Opportunity

The recent immigrant Mexican Indigenous population was not afforded the benefits of education in their youth. Two-thirds of respondents (65%) reported having no or only elementary school education. Focused efforts on increasing education and literacy for adult learners would enhance family wellbeing and improved health. The local school districts can reach out to provide adult education, while the North County Cuesta campus can be the location of further educational efforts to improve job skills and earning potentials.

Invest in Climate Resilience

Assessment participants, nearly all of whom are farmworkers, expressed concern with excess heat, smoke, and natural disasters. These will only be exacerbated with continued climate change. As San Luis Obispo County assesses and prepares for climate resilience, it is essential to include the outdoor immigrant workers who will bear the brunt of the climate issues.

³³ Young, Sandra, Norma Gomez, and Annette E. Maxwell. "Providing health education to Mixtec farmworkers in California via workshops and radio: A feasibility study." *Health Promotion Practice*. <u>Access Online</u>.

Develop Novel Strategies to Renew Ongoing Response to COVID Education

As COVID-19 continues to be an endemic problem in our society and communities, greater vaccination and awareness of COVID-19 is needed. Novel communication strategies will be required to inform and educate the community about receiving vaccines and the ongoing role that COVID-19 and other emerging infections plays in our lives and community health.

These strategies will be most successful if they build from the principles of equity and access and follow the previous recommendations identified above.³⁴ With regards to COVID-19, this could include incorporating education and vaccines into other initiatives, such as at community events and through mobile clinics. While these types of services were provided for the general population throughout the height of the pandemic, historically underserved populations will lose access if all COVID-19 services revert to the typical format of healthcare delivery through physician's offices and pharmacies. Whenever possible, implementation of COVID-19 initiatives should be conducted in neighborhoods and at workplaces, and in combination with other essential community needs, such as providing food, enrolling eligible community members into Medi-Cal, or providing healthcare services directly. Educational materials about COVID-19 may resonate more fully based on existing community concerns and health behaviors. Further, these efforts should be conducted using appropriate interpretation and by leveraging existing sites of community knowledge sharing, such as the radio, social media, and WhatsApp.

Strategic Planning for the Future

The SLOPHD has taken the first step in identifying the needs of the Mexican Indigenous population in SLO county. The Department should incorporate ways to meet these needs in its ongoing strategic planning efforts, and work with stakeholders in housing, social services, environmental, health and nutrition agencies to do the same.

Statewide efforts are underway to systematically document the needs of Latinx Indigenous populations in the state. SB 435 was a proposal to take the critical and necessary first step to address underlying health inequities for Latinxs and Indigenous peoples by requiring state departments to collect and disaggregate data for additional Latinx groups and Mesoamerican nations. Further evaluation, study, and comparisons are needed to ensure effective responses that reduce equity gaps and contribute to positive health for all communities.

³⁴ See "National COVID-19 Resiliency Network" <u>Access Online</u> and "Catalyst California COVID-19 Rapid Response" <u>Access Online</u>

Conclusion

This report documents the demographics, living conditions, and health challenges faced by the Mexican Indigenous community in San Luis Obispo County. The demographic snapshot reveals a predominantly young and recently arrived population, with two-thirds having no education beyond elementary school. The majority, living in overcrowded conditions, grapple with the soaring costs of housing and lack access to public or subsidized housing, contributing to the alarming statistic that 64 percent reported insufficient funds to buy food in the past year.

To address these multifaceted challenges, the report delineates a set of recommendations. Strategic improvements to Medi-Cal enrollment, language interpretation services, and augmenting healthcare capacity are prioritized. Collaborative endeavors, incorporating traditional healing practices, addressing food insecurity, ensuring water quality, and integrating overcrowding into housing policies, are posited as imperative strategies.

The report accentuates the urgency of community service development, fortified digital health communication, and targeted initiatives for the unique needs of young children and parents. The imperative of innovative, community-centric COVID-19 education strategies is underscored, recognizing the persistent nature of the pandemic. This strategic approach aligns with broader public health and social policy objectives, aiming to cultivate inclusivity, resilience, and improved health outcomes for this community.

Appendix A – Population Estimate

Study Findings

The 325 Indigenous migrant respondents we spoke with represent at least 2,007 total individuals in their households, including their children. We know that there are more individuals than those who participated in this study, including those who were eligible but did not have the time to complete the survey due to work, family or other restraints. The team addressed any systematic bias in this exclusion by providing alternative times for individuals to participate, based on their working schedule, and by encouraging busy individuals to have another person from their household to participate.

To make an accurate estimate, we utilized our data in comparison to what other researchers have found in the last fifteen years. We looked at estimates of the number of farmworkers in the County, the ratio of Mexican Indigenous to non-Indigenous farmworkers, the number of agricultural workers in each family, and the percentage of Mexican Indigenous persons who were not farmworkers. We then estimated the number of Mexican Indigenous households, considering multiple workers in a household, and applied our survey results of the number of persons per household to estimate a total population of Mexican Indigenous persons in the County.

Farm working Population

Around the state, Indigenous migrants have comprised a large portion of the population for many years. In 2010, an estimated 24,000 to 53,000 Indigenous farmworkers were living in the Central Coast Region.³⁵ In San Luis Obispo County, we know from our study that the Mexican Indigenous population is new to our County with 60 percent having arrived in the past four years showing a growing number of indigenous immigrants.

There are a wide range of estimates of the number of farmworkers in San Luis Obispo County.

- The National Center for Migrant Health estimates that in 2017 there were 17,771 farmworkers in San Luis Obispo County. ³⁶
- The Census American Community Survey (2020) suggests that there are 6,767 agricultural workers in the County. However, there is a documented undercount of Latinx farmworkers in the Census., the estimate of ag workers includes ag managers

³⁵ Final Report of the Indigenous Farmworker Study (IFS) to the California Endowment." 2010. Access Online

³⁶ National Center for Farmworker Health. 2017. "Migratory & Seasonal Farmworker Population Estimates." <u>Access</u> Online

and owners. Experts that we consulted with³⁷ suggested that a) the Census only captures 65 percent of actual California farmworkers and b) approximately 15 percent of the agricultural workforce are non-farmworkers. With these adjustments the estimate is 8,849 farmworkers.

 Using 2016 data, a published study by Phil Martin and colleagues at UC Davis estimates that there are 8,880 farmworkers in SLO County.³⁸

Each data source uses different methodologies and time periods. The NAWS and the Phil Martin study look as those working in the County, while the Census estimates those persons living in the County. It is unclear what the inter-county migration trends are, nor how they affect the estimates of the farmworker population.

Given the range of estimates and their limitations we estimate that there are 9,000 to 15,000 farmworkers in the county in 2024.

Estimating the Mexican Indigenous Population in San Luis Obispo County

The National Agricultural Workers Survey (2015-2019) California sample estimates that about nine percent of farmworkers identify as Indigenous.³⁹ This estimate is based on a limited number of workplace-based interviews and includes counties where there are few Indigenous farmworkers.

Another community based health evaluation conducted in 2020 in San Luis Obispo County found that 12 percent of the Latinx Immigrant and Indigenous population identify as Indigenous.⁴⁰

We know from our study that there has been a sharp increase in Indigenous-identified individuals in the county in recent years. As well, both recent and historical data suggest that

³⁷ We consulted with two longtime farmworker demographic experts. Dr. Rick Mines was the director the National Agricultural Workers Survey, led the research team for the Indigenous Farmworker Survey, as well as participated in the COVID Farmworker Study, the Binational Health Survey, and many others. His research may be found at https://rickmines.wordpress.com) Ed Kissam has conducted numerous farmworkers and Latinx research studies. He led efforts to ensure a fair and accurate Census 2020 among Latinx immigrant communities. More information may be found at https://www.linkedin.com/in/edward-kissam-ba69009/.

³⁸ Martin, P. L, Hooker, B., & Stockton, M. (2019). Ratio of farmworkers to farm jobs in California increased to 2.3 in 2016. California Agriculture, 73(2). http://dx.doi.org/10.3733/ca.2019a0002

³⁹ California Findings from the National Agricultural Workers Survey (NAWS) 2015–2019: A Demographic and Employment Profile of California Farmworkers. Research Report No. 15 https://www.dol.gov/sites/dolgov/files/ETA/naws/pdfs/NAWS%20Research%20Report%2015.pdf

⁴⁰ Espinoza-Kulick, Mario. "Latinx Immigrant Health in San Luis Obispo County: A Report from the La Gente Unida Project." SSN Key Findings. Scholars Strategy Network, 2020. <u>Access Online</u>

individuals are reluctant to self-identify as Indigenous, even if they practice Indigenous cultures, languages, and traditions.

We estimate that 10 to 14 percent of farmworkers in the county are Indigenous. Combining this with the farmworker population estimate, we estimate that there are **900 to 2,100 Mexican Indigenous farmworkers** in the county, not counting those in other industries or children.

Our survey sample shows that 95 percent of Mexican Indigenous people identify work in farm work, meaning that at least five percent of the population work outside of agriculture. Our study utilized snowball sampling, and recruitment targeted agricultural workers, which may mean that we may have an overrepresentation of people working agriculture, and there may be even more individuals working outside of agriculture who are not reflected in this ratio.

Using our sample findings that five percent work in other industries, we estimate that there are **945 to 2,205 Mexican Indigenous working adults**.

In estimating the number of households in the Mexican Indigenous community, we have attempted to account for multiple working adults who live in a household. Our interviews found that 56 percent of interviewees lived in households where both spouses work in farming. There were other adults in the household who presumably worked in agriculture. Considering farmworker spouses and other adults in the home, we have adjusted the number of households by 25 percent and estimate there are **490 to 1,142 Mexican Indigenous households in the county.** This number is calculated by estimating the number of adults across households. Specifically, our findings and estimates provide evidence that 20% of households have one farm working adult, 67% of households have two farm working adults (56% of individuals with a spouse, plus 12% adjustment for other adults), and 13% of households have three farm working adults (including 13% adjustment for other adults). Although some individuals may have more farm workers in one household, this is accounted by estimating averages.

Based on the lowest estimate of adults, this would suggest that there are 945 adults living in various households. This would include 97 households with one farm working adult, 328 households with two farm working adults (656 individuals) and 64 households with three farm working adults (192 individuals). This adds up to 490 households and accounts for 945 adults. Similarly, in the high range of the estimate, 2,205 adults would be split proportionally between 228 households with one farm working adult, 765 households with two farm working individuals (1,530 individuals) and 149 households with three farm working adults (447 individuals).

Our study found that the average household size is seven individuals. Multiplying our estimate of the number of households by the average household size, we can estimate that there are between 3,430 and 8,000 are Mexican Indigenous community members are living in the County.

Appendix B – Hometown Communities

List of Hometown Municipios in Guerrero, Mexico

Municipio	
Cochoapa El Grande	184
Metlatonoc	35
Ometepec	9
Tlacoachistlahuaca	9
Malinaltepec	5
Xochistlahuaca	4
Alcozauca	3
Tlacoapa	3
Tlapa De Comonfort	3
Acapulco	1
Ayutla De Los Libres	1
Chilapa De Alvarez	1
Chilpancingo De Los Bravos	1
Cochoapa	1
Copanatoyac	1
Guerrero	1
Iliatenco	1
Manialtepec	1
San Luis Acatlan	1
Tlacuachixtlahuaca	1

List of Hometowns (Pueblos) in Guerrero, Mexico

Pueblo (1 of 3)		Pueblo (2 of 3)		Pueblo (3 of 3)	
Cochoapa El Grande	111	Tierra Blanquita	2	Loma Canoa	1
Metlatonoc	21	Zitlaltepec	2	Los Llanos	1
San Lucas	11	Acatepec	1	Los Pinos	_
		•	_		1
Cahuañaña	6	Barranca De La Palma	1	Miahuatlán	1
Ometepec	6	Cahuanana	1	Ocotequila	1
Cieneguilla	5	Calpanapa El Viejo	1	Rancho Viejo	1
Rio Amaca	4	Cascada	1	Rio Encantador	1
San Miguel Del Progreso	4	Chilapa De Alvarez Chilpancingo De Los	1	San Luis Acatlan	1
San Pedro El Viejo	4	Bravos	1	San Marcos	1
Tlapa De Comonfort	4	Chilpancinguito	1	San Miguel	1
Yuvinani	4	Coyul	1	San Miguel Amoltepec San Miguel Amoltepec El	1
Alcozauca	3	Cruz Verde	1	Viejo	1
La Soledad	3	Cuyuxtlahuac	1	San Miguel Tejalpan	1
Tierra Blanca	3	Espino Blanco	1	San Miguelito	1
Yozo Chun	3	Guadalupe	1	San Rafael	1
Yozondacua Nuevo	3	Guadalupe La Joya	1	San Sebastian	1
Yucunduta	3	Iliatenco	1	Santa Cruz	1
La Trinidad	3	Itia Nivehe	1	Temazapa	1
Zapote	3	Itia Tio	1	Tenamazapa	1
Cochoapa	2	La Cuarta De Cielo La Guadalupe Mano De	1	Tlacoachistlahuaca	1
Jicayan De Tovar	2	Leon	1	Tlacoapa	1
Joya Real	2	La Unificada	1	Vista Hermosa	1
Ocotepec Rio Encantador	2	Llano De Metate	1	Yoloxochil	1
Chiquito	2	Llano De Zacatero	1	Yozodacua	1
San Agustin	2	Llano Perdido	1	Yukunu Kaxin	1
San Agustin El Viejo	2	Loma Bonita	1		

List of Hometown Municipios and Pueblos in Oaxaca, Mexico

Municipio		Pueblo (1 of 2)		Pueblo (2 of 2)	
San Martín Peras	30	San Martín Peras	26	Reforma Juquila	1
Juxtlahuaca	6	El Jicaral	3	San Geronimo Progreso	1
Coicoyan De Las Flores	4	Ahuejutla	2	San Isidro La Raya Pera	1
Santiago Juxtlahuaca	tiago Juxtlahuaca 3 Rio Lagarto		2	San Juan Del Rio	1
Ejutla De Crespo	1	San Juan Piñas	2	San Miguel Peras	1
Juxtlahuaca Oaxaca	1	Chini Pera	1	San Pedro Pochutla	1
Mixtepec	1	Ejutla De Crespo	1	San Sebastián Del Monte	1
San Pedro Pochutla	1	La Divina Providencia	1	Santa Cruz Peredon	1
Santo Domingo Tonala 1 Lazaro Cardenas		1	Santiago Tilapa	1	
Silacayoapan	1	Mixtepec	1	Tlaxiaco	1
Sola De Vega	1	Paredol	1		
Tlaxiaco	1	Rancho Viejo	1		

Current Residence by Sending Municipio – South County

Nipomo	43	Arroyo Grande	14
Tlacoachistlahuaca	4	Juxtlahuaca	3
San Martín Peras	22	San Martín Peras	8
Metlatonoc	1	Santiago Juxtlahuaca	1
Tlaxiaco	1	Jalisco	1
Coicoyan de las Flores	3	Alcozauca	1
Juxtlahuaca	3		
Ometepec	1		
Xochistlahuaca	1		
Mixtepec	1		
Vicente Guerrero	1		
Sola de Vega	1		
Ejutla de Crespo	1		
Santo Domingo Tonala	1		
Santiago Juxtlahuaca	2		

Current Residence by Sending Municipio – North County

Paso Robles	164	Atascadero	11
Ometepec	7	Malinaltepec	3
Cochoapa el grande	111	Tlapa de Comonfort	1
Metlatonoc	22	Cochoapa el Grande	4
Malinaltepec	1	Lazaro Cardenas	1
Maturin	1	Metlatonoc	1
Guerrero	1	Alcozauca	1
Iliatenco	1		
Tlacoachistlahuaca	3	San Miguel	73
Juxtlahuaca Oaxaca	1	Cochoapa el Grande	57
Copanatoyac	1	Tlacoachistlahuaca	2
Chilpancingo de los Bravos	1	Cochoapa	1
Alcozauca	1	Ometepec	1
Manialtepec	1	San Luis Acatlan	1
Chilapa de Alvarez	1	Coicoyan de las Flores	1
tlacoapa	3	Metlatonoc	9
Tlapa de comonfort	1	Tlapa de comonfort	1
Silacayoapan	1		
Ayutla de los libres	1	Shandon	6
Acapulco	1	Cochoapa el Grande	6
Xochistlahuaca	3		
San Pedro Pochutla	1	Templeton	3
		Cochoapa el Grande	3

Appendix C – Reported Water Problems by Census Tract

	Sample	% Bad	% Bad	% Bad	% Any
Location	Size	Taste	Smell	Color	Problem
Arroyo Grande (11901)	2				
Arroyo Grande (11904)	0				
Arroyo Grande (11800)	1				
Arroyo Grande / South County (12302)	1				
Arroyo Grande (12305)	9	0%	0%	0%	0%
Atascadero (12706)	2				
Atascadero (12505)	2				
Atascadero (12502)	2				
Atascadero (12503)	5				
Nipomo (12403)	7	0%	14%	0%	14%
Nipomo (12404)	15	27%	13%	0%	27%
Nipomo (12405)	7	14%	14%	0%	14%
Nipomo (12406)	9	0%	22%	0%	22%
Nipomo (12306)	5				
Paso Robles (10207)	15	27%	33%	7%	40%
Paso Robles (10104)	75	20%	31%	5%	35%
Paso Robles (10206)	2				
Paso Robles (10103)	34	9%	35%	9%	38%
Paso Robles (10205)	5				
Paso Robles (10204)	35	14%	40%	3%	40%
Paso Robles (10202)	2				
Paso Robles (10302)	1				
San Miguel (10016)	62	21%	35%	6%	39%
San Miguel / North County (10303)	12	8%	42%	8%	42%
Shandon (10301)	6				
Templeton (13100)	1				
Templeton (12707)	2				

Note that estimated rates of water problems are only included for tracts with greater than six respondents.