



SAN JOAQUIN VILLAS HEALTH IMPACT ASSESSMENT

A ROADMAP OF THE PRESENT AND
POTENTIAL PATHWAYS TO HEALTH

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a project of
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INSTITUTE

ACKNOWLEDGEMENTS

Drawing the connections between land use, housing, and health in Greenlining's own affordable housing development has been an exercise in collaboration. On top of documenting various strategies used to promote healthy environments and economic development, this report tells the story of how a community grows stronger together. The Greenlining Institute and its Bridges to Health program would like to acknowledge the individuals and organizations that contributed their time, expertise, and resources to enable the completion of this study.

First and foremost, we would like to thank Firebaugh's leadership for sharing their thoughts, concerns, and community pride. Jose Ramirez, Firebaugh City Manager, was supportive through every step of this research process, and we thank him for his dedication to a shared vision for Firebaugh's healthy development. Dr. Marcia Salblan's unyielding work in Firebaugh as both a medical doctor and active community leader is inspiring, and we are grateful for the valuable insights she shared with us. Kristy Brinkley, Health Director of Firebaugh Las Deltas Unified School District, Jim Gordon, Firebaugh City Grant Writer, Phyllis Baltierra, Firebaugh Volunteer Coordinator and Senior Center Director, and John Baltierra, Firebaugh Computer Learning Center Director, were also generous with their time and assistance during the research process for this report, and they continue to do admirable work to strengthen Firebaugh. We also extend special thanks to Esperanza Valezco and the Relational Cultures Institute for supporting this project. To all of the many other Firebaugh community members who generously shared their time and insights with us, thank you.

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Furthermore, this project would not have been possible without the generous support of The California Endowment. The California Endowment is a private, statewide health foundation created in 1996, whose mission is to expand access to affordable, quality health care for underserved individuals and communities, and to promote fundamental improvements in the health status of all Californians.

A scene from the Firebaugh's Farmer's Market.

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SUMMARY & RECOMMENDATIONS

Over 6.5 million people currently live in California's Central Valley. It is projected that at least 11 million people will be living in the region by the year 2040. As the fastest growing region in the state—with a growth rate twice that of the rest of California—it is imperative that development take advantage of the new opportunities for equitable change. The following presents a new paradigm for affordable housing and equitable development.

Far too often, communities and corporations work in silos—ignoring potential opportunities to improve health. Families are forced to live on top of one another in inadequate conditions. Liquor stores provide the only access to food in too many low-income neighborhoods. The low-income and underserved are stuck in jobs without benefits and chances for promotion. However, development in the Central Valley can take a new course, one that transforms lifestyles and landscapes toward the improvement of human health.

A holistic view of health recognizes that health is not just the absence of injury or illness. The health of a community rests in the ability for its citizens to feed their families, to pursue meaningful work, and to live in safe environments. As the population of California's Central Valley continues to increase, new housing developments will inevitably transform the physical, built, and social landscapes of the region—affecting employment, living conditions and the distribution of resources. Among others, these factors contribute greatly to the health of both individuals and entire communities.

Health Impact Assessment (HIA) is an emerging interdisciplinary practice that utilizes this holistic view of health to evaluate the effects of a given program, policy, or project on the health of a community and the distribution of those effects within the population. In partnership with California Community Builders and Coastal Rim Construction, The Greenlining Institute will be constructing the San Joaquin Villas, a residential subdivision of 21 affordable single-family detached homes in Firebaugh, a small rural city in the west side of Fresno County.

The Greenlining Institute has completed an HIA in tandem with its development plans in Firebaugh to determine the ways in which housing developments can most effectively promote community engagement, empowerment, and respect for the environment. This Health Impact Assessment (HIA) is an attempt to:

- Document the decisions made by The Greenlining Institute as a housing developer in the rural Central Valley city of Firebaugh.
- Analyze how these development plans will impact the health of Firebaugh residents.
- Offer recommendations for how future housing developments can best promote the holistic health of individuals and communities.

Interviews with Firebaugh community members revealed that access to housing, nutrition, and employment are among the primary health concerns of the residents, and have thus been chosen for analysis in this HIA. Drawing upon relevant published research, qualitative data, and the established development plans, the following sections present a summary of Greenlining's recommendations.

HOUSING

Being able to live in safe homes and neighborhoods directly affects one's mental and physical health. In Firebaugh, there is a severe shortage of available rental options, and homes for sale are

considered too expensive. The Greenlining Institute's development is a positive contribution toward alleviating the limited housing availability, affordability, and accessibility in the city. Future developments can be improved by incorporating additional sustainable design features, prioritizing long-term affordability for all-income levels, and incorporating linkages with existing and planned community resources.

RECOMMENDATIONS: AVAILABILITY

- Construct an adequate amount of homes with more than 3 rooms to comfortably accommodate larger Firebaugh families.
- Incorporate additional sustainable design features such as compact fluorescent lighting, low-flow fixtures and dual-flush toilets, local sources for materials, and indoor air filtration systems.
- Prioritize plans for recreation areas and community gardens in development designs to be managed by home owners associations.
- Raise density levels for residential buildings in order to make housing both more affordable and more land efficient.
- Leverage more state grants and resources toward funding city infrastructure upon demonstrating that they are growing in an affordable and sustainable way (i.e. high density).

RECOMMENDATIONS: AFFORDABILITY

- Provide financial education and first-time homebuyer courses with professional translation services.
- Offer rental options for visiting professionals and migrant workers.
- Create an inclusionary zoning plan so that at least 20% of new housing in Firebaugh is affordable to low and very low income residents.
- Provide incentives for market rate developers, who generally dislike inclusionary zoning ordinances, to work in Firebaugh by providing them density bonuses and a prioritized review session.
- Find a balanced approach to developing both affordable for-sale and rental housing according to the needs of the community.

RECOMMENDATIONS: ACCESSIBILITY

- Develop standards for development that takes input from public health professionals, planners and researchers around the linkages between housing, community resources, economic development and health.
- Encourage economic development strategies that cater to the specific needs of isolated and rural regions.

ACCESS TO HEALTHY FOOD

Having access to nutritious foods is a crucial component for having a healthy lifestyle. There is a lack of options for healthy eating within Firebaugh with only one grocery store, a few convenience stores, and a once a week farmers' market from April to October. The Greenlining Institute is partnering with other community organizations and the city of Firebaugh to ensure that grocery retail and direct access to produce improves in the city. All such efforts should prioritize the affordability, accessibility, and quality of nutritious foods for all Firebaugh residents along with outreach efforts to promote healthy lifestyle choices.

RECOMMENDATIONS: GROCERY RETAIL

- Prioritize the sale of high-quality healthy food options that are made affordable and accessible to Firebaugh's vulnerable populations.



- Conduct more research around the benefits of attracting grocery retailers with an emphasis on culturally competent and healthy products.

RECOMMENDATIONS: DIRECT ACCESS TO PRODUCE

- Promote the use of Community Supported Agriculture (CSAs) to future residents of the San Joaquin Villas.
- Incorporate areas for a community garden in future developments to be managed by each neighborhood's homeowner's association.
- Conduct more outreach and education to residents of Firebaugh and other rural towns on the benefits of nutritious eating.
- Prioritize transportation as a key factor in accessing nutritious foods. Take in consideration the potential of sponsoring shuttle services to and from the grocery store.

JOB SECURITY

A stable and adequate income is necessary for people to afford nutritious goods, a safe shelter, healthcare, and to uphold a healthy community. Many local employment options in Firebaugh are only seasonal and sometimes informally arranged work related to agriculture. Existing employers are working closely with community-led efforts to enhance job training programs, but there is still a need to attract employers with higher-wage jobs. A significant step to attract these employers begins with education and vocational training programs. The Greenlining Institute and the City of Firebaugh should support existing education and training programs by contributing its research capacity as well as by connecting these programs with potential funding opportunities.

RECOMMENDATIONS: HEALTHY EMPLOYMENT

- Leverage resources and networks to help support existing education and training programs.
- Look at ways to bring "green industry" such as solar and wind power producers, into the area when feasible.
- Expand programs such as the Westside Institute of Technology and MESA to cultivate a more highly-trained and employable workforce.

-
- Continue working together to produce supportive services that develop and nurture local small businesses that will in turn employ local workers.

This health assessment is a tool that serves to inform Firebaugh’s stakeholders of issues related to health and community development. Similarly, this report provides data that assists in prioritizing issues for Firebaugh city leaders and leaders from other similar cities to turn into policies or programs. *Who should use this report?* Developers, city planners, community-based health and sustainability advocates, and anyone concerned with growth in the Central Valley.

The story of viewing health holistically in the City of Firebaugh is emblematic of the various other cities in the region that will face similar development choices. A community that can connect the issues of health, housing, nutrition, and employment in partnership will be more effective in eliminating the disparities that plague underserved communities the most.

Development in the Central Valley can take a new course, one that transforms lifestyles and landscapes toward the improvement of human health.



Dr. Marcia Sablan managing her community health clinic in Firebaugh

INTRODUCTION



"We have enough illness. Yes, we're looking for health," expressed Dr. Marcia Sablan relieved to hear that a health study was being done in her town. "All of us here are working, working, working and don't have time to stop and study," she added. Dr. Sablan and her husband run a medical clinic that is filled to its patient capacity in the rural Central Valley city of Firebaugh, CA. The Sablans' clinic sees members of the Firebaugh community most often when they already have a marked physical health condition, such as an injury, asthma, or diabetes. While such medical care is a crucial component of individual and community health, a holistic consideration of health reveals that there are many more alternative avenues to consider when addressing health concerns.

To a large extent, factors such as where people live, natural conditions, genetics, income and education levels, as well as relationships with friends and family all have considerable impacts on health. Studies show that the more commonly considered factors such as access and use of health care services often have less of an impact.¹ To realize a community's potential for healthy living, these social determinants—rather than physical causes—of health need to be addressed comprehensively.

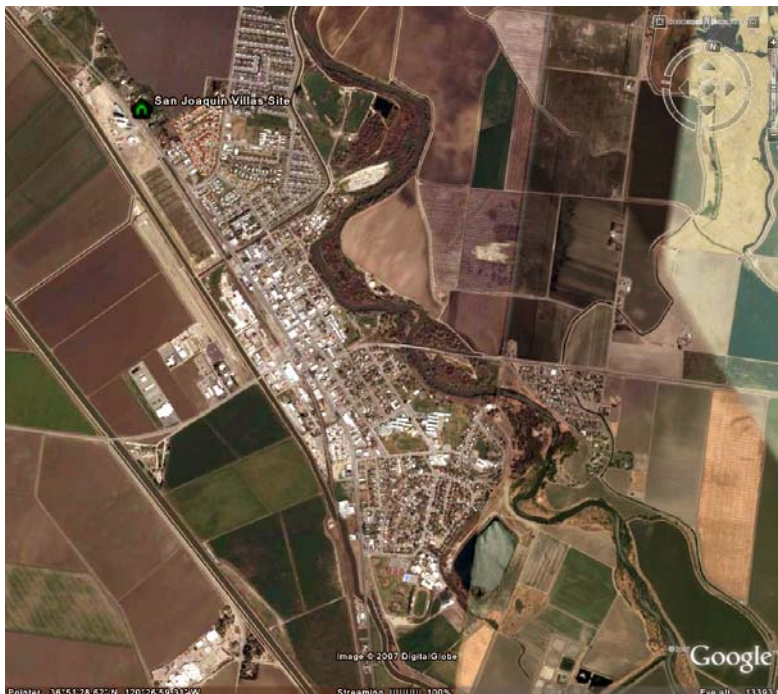
This holistic view of health recognizes that adequate health care must prioritize equitable pathways toward improving the physical, mental, and social well-being of communities. The Institute of Medicine articulates this clearly, "All members of a community are affected by the poor health status of its least healthy members."² Throughout California and the United States, low-income and minority communities like Firebaugh are disproportionately plagued by poor health conditions.³ As a multi-ethnic public policy, research, and advocacy organization that serves these disadvantaged communities, The Greenlining Institute has adopted this holistic approach to health when advocating for community development, empowerment, and the elimination of health disparities.

THE CITY OF FIREBAUGH & THE SAN JOAQUIN VILLAS

One such community development project is the construction of affordable housing in Firebaugh, a rural city in the San Joaquin Central Valley. At the time of this report, Firebaugh has nearly a 0% vacancy rate, meaning that there are almost no available rental and for-sale housing units.⁴ Firebaugh is located in the west side of Fresno County, about 43 miles west of the City of Fresno and 18 miles east of Interstate 5. With an area of 3.6 square miles, it is a relatively small town with a population close to 7,000, of which 88% are Latino. Firebaugh's population nearly doubles during certain months when crops, such as cantaloupes, tomatoes, and cotton, are harvested from the surrounding agricultural fields.

In partnership with California Community Builders and Coastal Rim Construction, The Greenlining Institute will construct the San Joaquin Villas, a residential subdivision of 21 single-family detached affordable homes in the northern part of Firebaugh along Highway 33. The planned development is more than just the construction of 21 houses; it will mark a transformation of the physical, social, and economic circumstances for 21 families. The approach to development for this pilot project is one that involves a great deal of partnerships with community-based organizations, local and state governments, as well as with private industries and banks. The development will alter the city's landscape and set an example for future affordable housing developments. In light of this, the Greenlining Institute is committed to developing in a way that values community engagement, empowerment, and respect for the environment. Such approaches present a unique attempt to incorporate healthy and equitable development that may in the future be used to evaluate community-based development in light of potential grants and obtaining the necessary state and local governmental approvals.

FIREBAUGH, CA AERIAL VIEW



FIREBAUGH AND FRESNO COUNTY OVERVIEW ^a

| | Firebaugh | Fresno County |
|---|---------------------------|--------------------|
| POPULATION | | |
| Total ^{b 5} | 6,710 | 899,514 |
| By age | | |
| under 18 years | 38.5% | 32% |
| 18-64 years | 55.4% | 58.1% |
| 65 years and over | 6.1% | 9.9% |
| By Race/Ethnicity | | |
| Hispanic/Latino | 88.1% | 44.1% |
| Non-Hispanic White | 9.3% | 39.6% |
| Black or African American | 1% | 5% |
| Asian, Hawaiian and Pacific Islander | 0.4% | 7.9% |
| American Indian/Alaskan Native | 0.4% | 0.8% |
| Non-Hispanic Multiracial | 0.7% | 2.6% |
| INCOME | | |
| Median household income | \$31,533 | \$34,725 |
| Average household income | \$38,270 | \$47,858 |
| Poverty rate | 22.5% | 22.9% |
| EMPLOYMENT | | |
| Unemployment rate | 20.6% | 11.8% |
| Pct. Pop. 16+ years old who are employed | 46.4% | 52.8% |
| EDUCATION | | |
| Pct. Persons 25+ years old with no high school diploma or GED | 63.6% | 32.5% |
| Pct. Persons 25+ years old with a bachelors or graduate/professional degree | 3.5% | 17.5% |
| HOUSING | | |
| Average household size | 4.1 | 3.1 |
| Homeownership rate | 54.7% | 57.5% |
| Pct. Rental households overpaying | 30.4% | 38.9% |
| Pct. Households overcrowded | 36.4% | 17.1% |
| HEALTH ^c | | |
| Adults without health insurance for the entire year | <i>Data not available</i> | 16.6% |
| Pct. Adults diagnosed with diabetes | <i>Data not available</i> | 7.8% |
| Pct. Adults Overweight or Obese | <i>Data not available</i> | 61.7% |
| Physicians and Surgeons per 1,000 people | <i>Data not available</i> | 2.0 |
| AREA | 3.6 square miles | 5,963 square miles |

^a Unless otherwise indicated, all figures are from the 2000 Census

^b California Department of Finance (2006)

^c UCLA Center for Health Policy Research (2003)

RESEARCH DESIGN

In line with Greenlining's holistic approach to community health, a Health Impact Assessment (HIA) has been completed in tandem with the Firebaugh housing development. HIA is an emerging interdisciplinary practice that evaluates the effects of a given program, policy, or project on the health of a population and the distribution of those effects within the population.⁶ The goals of this HIA are to:

- ◆ Evaluate the ways in which The Greenlining Institute's housing development and involvement in Firebaugh may impact the health of Firebaugh residents
- ◆ Identify opportunities for promoting optimal individual and community health in Firebaugh
- ◆ Spark a dialog in the Firebaugh community about collaborating for health promotion
- ◆ Inform developers, academics, governmental agencies, and community-based organizations pursuing similar projects in a rural setting of a potential way to incorporate health issues into development

Numerous tools and methods have been developed for planning, researching, and utilizing HIAs, but the research design for an HIA is ultimately case-dependent.⁷ For the Firebaugh HIA, a combination of academic, government, and international resources were reviewed to synthesize a research design that is appropriate for the project's characteristics and intentions. This report is the product of a 3-step plan:

I. Screening

This primary step weighed the feasibility of conducting an HIA and the value of such information to The Greenlining Institute's objectives as a developer in Firebaugh. Due to the overwhelming support of Firebaugh city officials and leaders, Greenlining was quick to partner with the city to undertake the study. As an advocacy organization, Greenlining believes that an HIA offers a valuable method for ensuring that its efforts most effectively advance its priorities of social justice and community empowerment.

II. Scoping

The purpose of the scoping step is to consider the potential health impacts of the proposed development and decide which health issues should be assessed. We completed a literature review of studies relating to:

- ◆ Health Impact Assessments
- ◆ Community participation and public health research
- ◆ Community design, social equity, and health-outcomes

After reviewing the planned development and consulting with Firebaugh city officials, the following table was developed around the potential impacts not only of the housing development, but also of Greenlining's potential partners:



| PROJECT COMPONENT | CONNECTION TO HEALTH |
|--|---|
| Housing | <ul style="list-style-type: none"> ◆ Development projects that promote density, or compact development have positive health impacts.⁸ ◆ Unaffordable housing is a consequence and cause of poverty.⁹ ◆ Housing maintenance and the physical conditions of houses affects health outcomes of those residing within it.¹⁰ |
| Access to Healthy Food | <ul style="list-style-type: none"> ◆ The proximity to nutritious food and knowledge of proper diet contributes to healthy lifestyles. |
| Job Security | <ul style="list-style-type: none"> ◆ Income is one of the strongest and most consistent predictors of health.¹¹ ◆ Unemployment and underemployment is associated with numerous physical and mental health conditions, such as cardiovascular disease, hypertension, depression, and suicide.¹² |
| Transportation | <ul style="list-style-type: none"> ◆ The availability of transportation affects the ability for people to access healthcare services. ◆ Injuries from traffic accidents are a significant cause of disability and death.¹³ |
| Social cohesion and social integration | <ul style="list-style-type: none"> ◆ Strong social relationships are a source of emotional and materials support. ◆ Segregation has negative effects on health.¹⁴ |

Greenlining worked with Firebaugh’s City Manager, José Ramirez, to prioritize the project components to assess. In total, we collected 18 key informant interviews of city leaders from diverse sectors such as healthcare, city government, education, senior care, and potential homeowners where participants were asked to identify and evaluate their major health concerns, the strengths and weaknesses of the Firebaugh community. These interviews narrowed the scope of the study to evaluating Greenlining’s potential impact on housing, nutrition, and job security.

III. Assessment

The purpose of the assessment is to specify the potential linkages between each health concern and Greenlining’s involvement in Firebaugh. This involved research into the current and planned efforts related to the issues of housing, nutrition, and job security and how each of these are connected to individual and community health. Such research involved a literature review of publications by academics and federal, state, county, and local organizations as well as phone interviews to find out more about programs specific to Firebaugh. Qualitative data was also matched with quantitative data from the U.S. Census as well as from the California Health Interview Survey (CHIS) data for Fresno County. This data was also placed into context with relevant docu-

ments such the City of Firebaugh's Community Revitalization Plan, the 2030 Firebaugh General Plan Update (draft version), the housing development's summary appraisal report contracted by the Bank of the West, and studies by other organizations such as the Relational Culture Institute¹⁵ and Buxton.¹⁶

This report is a contribution to an ongoing dialogue around the San Joaquin Villas and The Greenlining Institute's entry into the Firebaugh community and residential housing development in general. While the report strives to be comprehensive, it is by no means complete. As one advocate for HIAs states:

HIA has the potential to be a promising tool for promoting awareness of societal determinants of health and reducing social disparities in disease, disability, death, and wellbeing...Whether the public's health will concretely benefit from the implementation of HIA remains unknown; achieving this objective will minimally require engaged and sustained dialogue and debate, among and between researchers, practitioners, affected populations, and policy makers and analysts, about the utility, limitations, and practice of HIA.¹⁷

In hopes of continuing this dialogue, the following chapters document Greenlining's attempts to set a good example, one that synthesizes public health and development toward eliminating disparities.

HEALTHY HOUSING: AVAILABILITY & AFFORDABILITY



The San Joaquin Villas are modeled after a similar affordable, single family, and detached housing development in Gilroy, CA.

“Having to rent a home really kills me because I pay a lot of rent...over a thousand dollars a month on rent is a lot of money,” remarks a long-time Firebaugh resident who has been renting a 3-bedroom home since 1977. Similarly, over half of the community members interviewed for this study were not happy with the current supply, price, or location of housing options in Firebaugh.

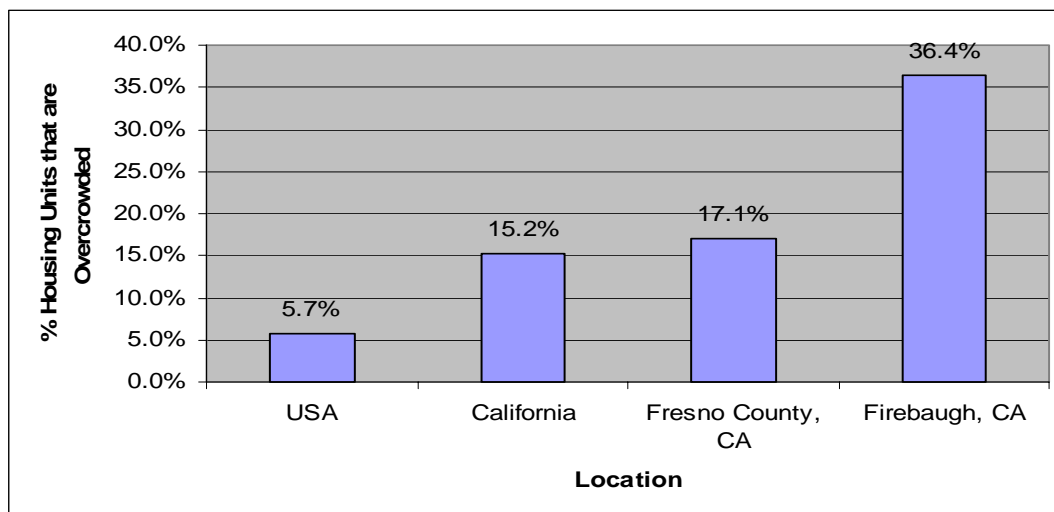
As one of the many factors that contribute to the health of individuals and a community, healthy housing requires more than just the presence of a roof over one’s head. Availability, affordability and location are qualities of housing that influence the well-being of all residents.

The availability of housing refers to the number of housing units in a community and the physical characteristics of those units. Vacancy rates and housing conditions have been shown to have a significant effect on the prevalence of infectious and chronic diseases, injuries, mental health, and childhood development.¹⁸

The affordability of housing takes into account the price of the unit (total price and monthly rent or mortgage payments) and additional utility and maintenance costs, such as gas, water, electricity, repairs and homeowner’s association fees. Total costs for housing that amount to greater than 30% of a household’s income are considered a financial burden, making it difficult for the household to afford basic necessities such as food, clothing, transportation, and medical care,¹⁹ resulting in adverse affects on health.²⁰

An additional factor to consider for healthy housing is location in relation to certain services (i.e. schools, parks, retail, and transportation) and the surrounding neighborhood characteristics that influence individual and community health such as noise, violence, and social cohesion.²¹

Figure 1: National, State, County, and Local Overcrowded Housing Units



Supporting healthier housing conditions in Firebaugh will require attention to all three interconnected components of healthy housing: availability, affordability, and location.

HOUSING AVAILABILITY

Firebaugh's 0% vacancy rate²² for rental and for-sale housing shows how limited housing options are in the city. An implication of such a limited housing supply can be seen in Figure 1, which shows the high percentage of housing units in Firebaugh that are overcrowded in comparison to county, state, and national figures.²³ Crowded living conditions increase the likelihood for the transmission of communicable diseases and ailments such as tuberculosis and other respiratory infections.²⁴

The Greenlining Institute's plan to construct 21 new single-family homes in Firebaugh stands as a contribution toward the alleviation of Firebaugh's overall housing shortage and the associated health concerns. A 2005 Firebaugh Housing Market Study prepared for the Relational Culture Institute projects a total of 1,571 housing units in Firebaugh for 2007, of which 864 (55%) are owner-occupied households and 713 (45%) are renter-occupied. The 21 San Joaquin Villas homes will therefore be about 2.4% of the total owner-occupied homes in the city and will house about 1.25% of Firebaugh's population.²⁶

Beyond creating additional housing units, promoting a healthy availability of housing requires the construction of homes that have adequate physical characteristics, such as appropriate size, sustainable design, and additional amenities.

DETERMINING SIZE

In light of the health problems associated with overcrowding, a healthy home must have enough rooms to accommodate the number of anticipated future residents. Furthermore, to best accommodate diverse housing needs, housing would ideally be developed for various family sizes. The U.S. Census Bureau considers homes to be overcrowded when there are more people than total rooms.²⁷ After consulting with Firebaugh officials and residents, Greenlining's single-family homes of the San Joaquin Villas development will be 1,293 sq. ft. and have three bedrooms, two bathrooms, a kitchen, living room, and attached garage. Upon consulting with community members, it was decided that the three bedrooms and living room make the Villa homes appropriate for the average Firebaugh household of 4.1 people.²⁸ Having larger homes as part of the design would reduce the number families that this project is able to serve while smaller homes would have eliminated the majority of local low-income families as potential homebuyers. There will still be a need, however, for a variety of home types and sizes in town. Future developments in the area should also include homes with more rooms to adequately accommodate the Firebaugh households larger than the median size.

SUSTAINABLE DESIGN

Sustainable design features in housing developments support improved human health and the environment by using less energy, water, creating less waste, reducing greenhouse gas emissions, and lessening exposure to mold, mildew, and other indoor toxins.²⁹ The most widely accepted benchmarks for sustainable design are the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) Green Building Rating System™. In California, the non-profit organization Build It Green has developed a GreenPoint checklist and rating system to help promote the construction of healthy, energy and resource-efficient buildings.³⁰ While Greenlining was unable to secure the necessary funding for a LEED or GreenPoint evaluation, it is still possible to highlight some of the sustainable design features of the home design.

- ◆ **High-Density Land Use:** The 21 detached residential units will be built on a 1.7 acre lot. This type of rural high density land-use was unanimously approved by both the Planning Commission and the Firebaugh City Council. This is significant because it required a general plan amendment that almost tripled the allowable density for this parcel of land and is a good representation of how much the city government of Firebaugh believes in both the project and progressive land-use concepts.
- ◆ **Detached:** Each house will be detached from the other homes and will each have a yard. This is unlike many affordable and high-density housing developments where residents need to share walls or contain units built on top of one another.
- ◆ **Solar Panels:** With assistance from GRID Alternatives, a San Francisco based non-profit organization, each home will be equipped with rooftop solar panels. The use of solar energy will reduce each home's carbon footprint and decrease each family's energy bill by 75%.³¹

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- ◆ ***Bridging the digital divide:*** Each family will move into a home that is a.) broadband ready; b.) equipped with a computer, printer and modem; and c.) has one year of deeply discounted (\$5/month) internet service. Greenlining is currently in the process of reserving space for a representative of each family at local computing classes so that they have both the hardware and the skills to maximize the use of their new computers.
 - ◆ ***Energy Efficient Appliances and Building Standards:*** Each home will also have ENERGY STAR appliances, which will further reduce each home's use of non-renewable energy resources and monthly utility costs. In conjunction with this each home will also be built to a standard that is at least 15% greater than current energy efficient building requirements.

In addition to these sustainable design features, future housing developments should consider including additional elements to further support human and environmental health. For example:

- ◆ ***Compact fluorescent lighting*** further reduces each home's energy use.
- ◆ ***Low flow fixtures and dual flush toilets*** significantly reduce water use, which is an especially important consideration in the agriculturally based Central Valley.
- ◆ ***Local sources for material*** reduce pollution caused from transporting building supplies over long distances and support local businesses.
- ◆ ***Indoor air filtration systems*** would improve indoor air quality, which is another important feature to prioritize in the Central Valley due to the very poor outdoor air quality and associated high asthma rates in the area.

These and other techniques have been incorporated into other affordable housing projects in rural communities, as reported by the Housing Assistance Council's recently released report on affordable green building in rural communities.³²

ADDITIONAL AMENITIES

Basic amenities such as lighting, water, waste-management, and structural stability are required by the California Building Standards Code. Housing that is most healthy for residents and the community should, however, also include additional amenities. Homes in the San Joaquin Villas will each come equipped with a computer and broadband internet connection. This access is especially important because information technology has, over the past decade, become less of a luxury and more of a necessity, even in rural areas such as Firebaugh.

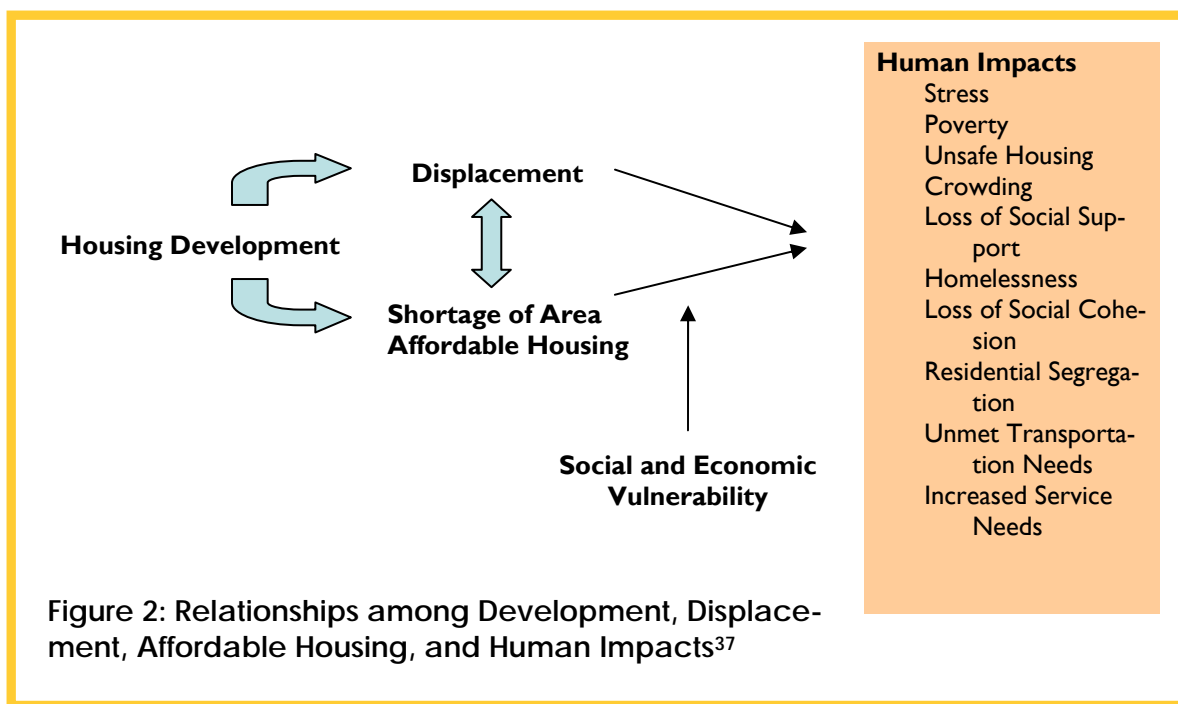
The homes will also come with 40-year roofs as opposed to more commonly included 20-year roofs. This will provide more reliable protection from moisture, a lower cost burden for future repairs, and maximize the life of the solar panels. Solar systems usually last only as long as the roof where they are situated.

Lastly, each home will have an outdoor patio that faces a shared common area. Such features will likely allow for interaction among neighbors that promotes social cohesion.

Additional amenities, such as an indoor or outdoor recreation area to promote physical activity and a community garden area to provide access to fresh produce and further support social cohesion, would be ideal to include in future development designs. Due to the relatively small scale of this housing project and modern economics of land prices in California, it is difficult to include additional open space in the design of the San Joaquin Villas without sacrificing the affordability of the homes. The Greenlining institute was negotiating for more land at the time of this report’s publication. Future developments, however, should prioritize such additional amenities in their design to most effectively support the social setting of the neighborhood and healthy lifestyles for residents.

HOUSING AFFORDABILITY

Beyond providing available housing units, healthy housing must be affordable to residents of all income-levels. Currently, homes in California are the least affordable in the nation, with just 11.7% of all homes sold being considered affordable to a median income family.³⁴ In the Central Valley in particular, prices of new homes doubled between 2004 and 2006 because of the construction of much larger homes than were previously available in the markets.³⁵ To meet the housing demands of the 3.5 million new residents who will live in the region by 2050,³⁶ new housing construction will continue to grow in the Central Valley. These housing developments, however, will only support the health of the region and residents if the new homes are made affordable to all portions of the population, including the current and future low-income residents. Failing to provide affordable housing to low-income residents has been linked to a negative impact on physical, mental, and social health. In Figure 2., each of the human impacts listed in the figure that result from displacement or a shortage of affordable housing in an area have also been linked to specific health conditions.



A complete evaluation of the affordability of a home requires an assessment of the cost at initial occupancy and over time.³⁸

INITIAL COST

The cost of the San Joaquin Villas homes is intentionally calculated to be affordable to low-income Firebaugh residents. As an affordable residential subdivision, the project is committed to having 11 units for homebuyers with an income level at 80% of the area median income (AMI) and 10 units for homebuyers with an income level at 50% of the AMI.

While the goal of Greenlining's affordable development in Firebaugh is to provide homeownership options for low-income families in Firebaugh, future developments should also address the issue of workforce, or moderate-income housing. For example, a long-time Firebaugh resident reports that she has been renting a home for over 30 years because she has not found ownership options in Firebaugh for her middle-level income status. She has experienced that homes that are available to purchase are only accessible to very low or high income households. Without the option for homeownership, moderate-income Firebaugh residents miss out on the financial and social benefits that are associated with homeownership.

FINANCIAL EMPOWERMENT

Constructing homes with a relatively low list price is just one step toward providing affordable home ownership options for low-income Firebaugh residents. Long-term affordability of the homes for low-income families requires that residents responsibly manage their finances, receive appropriate loan terms, and have reasonable monthly fees for their homes.

Financial Education

The Greenlining Institute collaborated with Bank of the West and other non-profits, such as the Relational Culture Institute and ACORN, to provide a first-time home-buyer class for Firebaugh residents. An informational flyer was included in a monthly water bill, and approximately 40 residents attended the evening class to learn about the process for seeking and qualifying for homeownership. Given the large turnout for such an event, additional classes should be offered to meet the demand for information about homeownership that many Firebaugh residents have. For improved effectiveness, future classes should offer childcare and professional translation services. These issues are important because interviews with residents revealed that many who wanted to attend were not able to because of the need to take care of their children. Several who did attend also felt that professional translators were needed over the improvised translations that lacked clarity.

Additionally, the 21 families selected to live in the San Joaquin Villas will be required to attend other classes about financial management before and after moving into their new homes. The Greenlining Institute will again be collaborating with banks and other non-profits to teach residents to responsibly manage their finances.

Loan Terms

The Greenlining Institute is exploring a partnership with the USDA Rural Development and other leading financial institutions to provide the 21 new homeowners with a down payment and interest rate that will not require more than approximately 30% of owners' monthly income. The USDA Rural Development can provide approved families with a no down payment, 1% interest subsidized loan. For families who do not qualify for the Rural Development financing, such as those without approved immigration status, The Greenlining Institute is in close collaboration with Bank of the West to develop unique mortgage terms that more closely fit what is financially feasible for residents, even if it means a term longer than the traditional 30 years. Historically, low-income and minority communities have had tenuous relationships with financial lending institutions.³⁹ However, The Greenlining Institute is in a unique position having advocated against redlining practices. These income-level appropriate loans will help set an example for the affordability options available to low-income and minority Californians who seek the American Dream of homeownership.

Monthly Fees

On top of a monthly mortgage, homeowners are also faced with monthly fees for utilities and, for those in condo developments such as the San Joaquin Villas, Homeowner's Association obligations. The solar panels and energy efficient appliances mentioned earlier for their sustainable design aspects will make the homes more affordable by cutting each unit's monthly utility costs by 75%.⁴⁰ The homeowner's association fee is predicted to be \$80-\$100 per unit. This cost will be incorporated into the calculations for monthly mortgage payments to ensure that each homeowner does not have to spend more than 30% of their income on housing-related costs, thereby allowing each family to have a sufficient disposable income for basic needs such as food, healthcare, and savings.

Although the San Joaquin Villas attend to the issue of affordable homeownership for low-income families, it is important to recognize that affordable rental housing is also an important option for other Firebaugh residents, such as professionals and migrant workers. More must be done to provide such rental housing. During her interview, a university researcher working in Firebaugh expressed great frustration with regards to her search for rental housing options and explains that there is a lack of professionals involved in the community because they can not find a place to live. This conjecture is supported by the fact that a majority of Firebaugh's teachers⁴¹ and law enforcement officials⁴² do not live in the community that they serve.

There is also a need to provide affordable housing to the 6,000⁴³ migrant workers who come to Firebaugh during the harvest season months of April through March. Although the Fresno Housing Authority provides some housing for the migrant population, the units are only offered to workers with legal documentation, preventing many agricultural laborers from having access to adequate housing options. Such a shortage of available and affordable housing for these workers forces many to resort to standard shelter in overcrowded conditions, such as garages. Including affordable rental options for both professional residents and migrant workers should be a priority for future housing developments in the area.

The San Joaquin Villas housing development has incorporated both initial and long-term affordability components that will make the homes within the financial reach of low-income Firebaugh residents. Future developments should also address the affordable housing needs of moderate-income and migrant residents. Land use policy has historically harmed social cohesion by involuntary displacing communities or implementing policies that indirectly lead to neighborhood disinvestment. The affordability of housing in particular has historically led to displacement which can further lead to job-loss, difficult school transitions, and loss of health protective social networks. The lack of affordable housing also leads to segregation of poor and minority communities to areas of concentrated racial inhabitation. These neighborhoods tend to have fewer institutional assets such as schools, libraries, and public transit. All these causes impact community health. It is for these reasons that The Greenlining Institute must make their homes affordable.

A NOTE ON HOUSING LOCATION

Just as healthy housing units must be available and affordable, healthy housing developments must be located close to community features that support healthy lifestyles. Standards for assessing all of the appropriate accessibility aspects have not been officially established, especially for rural areas. There is a growing body of research about the ways in which the built environment (physical infrastructure and infrastructure) impacts the physical and mental health of community residents.⁴⁴ Such built environment and community features include:

| | |
|------------------------|---|
| Health Services | Retail Options (food, clothing, furniture etc.) |
| Financial Services | Employment Opportunities |
| Parks and Open Space | Noise |
| Recreation Facilities | Civic Engagement |
| Schools and Childcare | Safety |
| Transportation Options | |

The San Joaquin Villas will be constructed in the north part of Firebaugh along Highway 33. Since the entire City of Firebaugh has an area of just 3.6 square miles, most of the city's resources will be relatively accessible to the future residents in terms of distance. Those without cars use the city's door-to-door dial-a-ride service that residents seem to approve. In terms of the quality of the resources accessible to residents, an in-depth look at each feature is beyond the scope of this report, but access to healthy food and employment opportunities will be assessed in the following sections.

CONCLUSION

The Greenlining Institute's affordable housing development is a step in the right direction for increasing the number of affordable housing units available in Firebaugh. The 21 new single-family, high-density homes in Firebaugh help address the current housing shortage in Firebaugh but make a much larger impact in the context of available for-sale housing that is affordable to low-income families in the Central Valley. The bene-

fits of homeownership are many for the community. It is known that people who own their homes within the communities in which they reside reflect a greater amount of civic participation. Residents who are more embedded in their communities also have a tendency to frequent their local businesses more often. Beyond the physical health benefits, these avenues toward economic, civic, and social empowerment are ones that communities should not overlook.

The Greenlining Institute and its partners are unique in being able to draw from relationships with financial lending institutions and community-based organizations to assemble the total package of these homes. The benefits of such partnerships for the health of the Firebaugh community suggest this model of development should be replicated. The Greenlining Institute's effort is an example of how developers may think innovatively and responsibly toward guaranteeing that residents receive the maximum benefits from their homes.

However, there are also many ways in which future housing developments can be improved upon. Housing availability can be improved by constructing homes with more than 3 bedrooms to accommodate large families, incorporating additional sustainable design features, and including areas for recreation and a community garden. Housing should be made more affordable by prioritizing options for low and moderate income families and individuals, working closely with financial institutions to provide favorable loan terms and financial education, and encouraging the development of rental options for visiting professionals and migrant workers. Lastly, the linkages between housing, community resources, and health should be further developed to ensure that new homes enable residents to have access to quality community resources such as transportation, education, employment, etc. Developing healthy housing options in the Central Valley will take the leadership of other developers, market rate and affordable, to envision a long-term plan for growth in the Central Valley and a commitment to addressing challenges through collaboration.

HEALTHY FOOD: ENABLING HEALTHY LIFESTYLES



Picture taken from inside the only grocery store in Firebaugh. Access to health and nutritious foods was a large concern for many Firebaugh residents.

“The grocery store has high prices and low selection...there needs to be better quality of produce and vegetables,” laments a retired farmer who has lived in Firebaugh for over twenty years. Echoing these remarks, over two thirds of the Firebaugh community members interviewed for this report said they are dissatisfied with the current availability of healthy food options in Firebaugh. Given the growing amount of literature supporting the direct impact that diet has on obesity and chronic disease rates, the lack of access to healthy food options in Firebaugh presents a significant health concern.

The Director of Health Services for the Firebaugh Las Deltas Unified School District, Kristy Brinkley, reports that she has observed increasing rates of obesity among students over the past five years and that almost all students raise their hand when she asks how many of them have a family member with diabetes. Her observations are in line with a reported statewide trend of increasing rates of obesity and related chronic diseases, rates that are especially high among communities of color and low-income individuals.⁴⁵

Latinos living in rural areas in particular are considered to have an even greater risk for diabetes.⁴⁶ City-specific obesity and chronic disease rates are not available for Firebaugh, but the compounding factors of having a large proportion of Latino residents, a considerable poverty rate, and a rural location suggest that Firebaugh is especially vulnerable to high rates of obesity and chronic diseases. This requires innovative programs and policies to help prevent and treat such mounting health concerns.

Even though obesity and chronic diseases are labeled as medical conditions, effective solutions need a collaborative approach that enables healthier lifestyle choices for Firebaugh residents. The California Department of Health Services’ “Obesity Prevention Plan” states,

“Real change will occur when government, business, agriculture, schools, land use planners, developers, transportation, retailers, public safety, health care, and media begin to work together proactively and collabo-

ratively to create environments that allow people to safely integrate physical activity such as bicycling or walking into their lives and to easily access affordable, healthy foods."⁴⁷

As suggested by the above quote, developers should consider ways to promote both physical activity and access to nutrition.

Fortunately, Fresno County and the City of Firebaugh are working on numerous programs to promote physical activity in Firebaugh. These include plans for a rural bike-way system,⁴⁸ enhancements to Maldonado Park, expanded sidewalks, and improved river walkway access. The Greenlining Institute plans to stay aware of the progress of these programs to find ways to support such efforts for promoting physical activity in the community. With regards to supporting access to nutrition, this chapter envisions the ways that Greenlining can collaboratively act to ensure the future residents of the San Joaquin Villas and broader Firebaugh community have improved grocery retail options and direct access to produce.

AVAILABILITY OF GROCERY RETAIL

Presently, Firebaugh has one supermarket and five smaller grocery stores. Interviews with Firebaugh residents reveal that many feel the current grocery supply in the town is overpriced, of low quality, and lacks variety. A 2007 market study sponsored by the City of Firebaugh and conducted by Buxton Inc., a private consulting firm, found that there is sufficient demand in Firebaugh to merit the opening of an additional supermarket in the city. The Firebaugh City Manager also reports that he is in the process of reviewing options for attracting a new supermarket.

There are three supermarket options that have been suggested for Firebaugh. First, the Buxton market study reports that a Safeway Store would be a viable option. Such an established company could be beneficial for the nutrition of Firebaugh residents because Safeway has an educational marketing campaign to encourage healthy eating, supplies organic products, and is included on the California Governor's Summit on Health, Nutrition, and Obesity Honor Roll for having an "Eating Right" product line.⁴⁹ However, Firebaugh interviewees involved in city development express doubts that a small town like Firebaugh could actually attract such a large vendor.

Second, a smaller and more local grocery vendor, R&N, is being considered. As a local chain, R&N has a warehouse in Visalia, just 80 miles from Firebaugh. Such proximity could ensure frequent and timely delivery of food with minimal associated travel costs.

A third option, collaboration with the Mexican American Grocer's Association (MAGA), has been put forth by The Greenlining Institute. MAGA is a member of the Greenlining Coalition, and a national trade association that seeks to serve the rapidly growing \$850 billion dollar Hispanic consumer and the retail, wholesale and manufacturing businesses that serve them in the grocery industry across the United States and Mexico. MAGA's website states, "The MAGA member retail stores are at the grassroots of the Hispanic community. They see and communicate with over 3 million predomi-

nately Hispanic consumers on a daily basis.”⁵⁰ It may be an apt grocer to serve the dietary preferences and language necessities of Firebaugh residents, given that 88% of the residents in Firebaugh are Latino.

Considering the current demand for an improved supermarket in combination with the Firebaugh community’s vulnerability to diet-related health conditions such as obesity and diabetes, it is clear that improved grocery retail options are necessary for the city. Any future actions to bring in an additional supermarket should prioritize:

- ◆ **Affordability.** The 22% of Firebaugh’s population who live below the poverty level should also be able to afford nutritious foods.
- ◆ **Accessibility.** The new supermarket should be centrally located and accessible by public transportation so Firebaugh’s vulnerable populations, such as the elderly and disabled, have access to nutritious food options. Additionally, the store should be open in the early morning and through the late evening to accommodate the 7am-7pm work schedule of Firebaugh’s many farm workers.
- ◆ **Quality.** Fresno County is the most agriculturally productive county in the nation, but many residents report limited and rotten produce options at the existing Firebaugh grocery store. The products that are available at the new grocery store should reflect the fresh bounty of the city’s surroundings.
- ◆ **Awareness.** The new vendor should be active in outreach efforts to educate the community about the health benefits of its new options for nutritious food choices. Additionally, the impacts a new business may have on existing food retailers should be given careful consideration to avoid purging the smaller, locally owned retailers.

These issues and recommendations should be prioritized in the City’s efforts to attract a new grocery store. How well Firebaugh city officials convince grocery retailers that investing in the Firebaugh community will be a determinant of whether or not another grocery store comes to town.

DIRECT ACCESS TO PRODUCE

In addition to improved grocery retail in Firebaugh, it is also possible to provide quality, accessible, and affordable food to Firebaugh residents through programs that provide more direct access to produce, such as

- ◆ Farmer’s markets
- ◆ Community-Supported Agriculture (CSA)
- ◆ Community gardens

These programs enable the community as a whole to benefit from Firebaugh’s existing assets of fertile farmland and friendly farmers by having access to the variety of healthy food options that are locally produced.

FIREBAUGH’S FARMER’S MARKET

The City of Firebaugh began hosting a weekly Farmer’s Market in 2007. Every Thursday evening from April through October, traffic is blocked along four blocks of a central

street in the downtown and tents are put up to provide vending stations for produce, prepared foods, crafts, and various retail items. Such a weekly event allows residents the opportunity to purchase fresh, locally grown fruits and vegetables directly from the farmers who grow and harvest them. The event also promotes social cohesion by offering residents a relaxed social setting and supports local businesses that are located near the main market street. The vendor, customer, and community benefits of the Firebaugh Farmer's Market certainly suggest that it is a model event that should be continued, expanded, and perhaps replicated in other rural communities. There is, however, some room for improvement.

The Firebaugh Farmer's Market is currently not registered as a California Certified Farmer's Market (CCFM). Seeking certification from the California Department of Food and Agriculture would provide low-income residents who qualify for the Food Stamp Program (FSP), the Senior Farmers Market Nutrition Program, and/or the WIC Farmers' Market Nutrition Program the ability to use their coupons or Electronic Benefits Transfers (EBTs) to purchase fresh fruits and vegetables at the market.⁵¹ Additionally, more healthy food options, such as the smoothies prepared by the City Health Committee, could be proposed as supplements to the other more fattening prepared food items that are currently offered, such as pupusas and tamales.

COMMUNITY SUPPORTED AGRICULTURE

Community Supported Agriculture (CSA) is a model of food production, sales, and distribution that supports small-scale farming and brings food producers and community members into a direct relationship. Community members pay a subscription fee to a local farm and in turn receive a seasonal variety of fresh produce items from that farm.⁵² In addition to providing community members with a fresh supply of quality fruits and vegetables, CSA also:⁵³

- ◆ Keeps food dollars in the local community and contributes to the maintenance and establishment of regional food production.
- ◆ Supports the biodiversity of a given area and the diversity of agriculture through the preservation of small farms producing a wide variety of crops.
- ◆ Creates opportunity for dialogue between farmers and consumers.
- ◆ Puts "the farmers face on food" and increases understanding of how, where, and by whom our food is grown.

In Firebaugh, there is a CSA program offered by Lone Willow Ranch, which is located 4.5 miles north of town. Lone Willow Ranch CSA currently has about 50 members and is planning on expanding its production in the coming seasons.⁵⁴ For \$20 a week, members receive a box of organic fresh produce that provides enough fruits and vegetables for a family of four for the week.

Despite the environmental and nutritional benefits of such a program, only a limited portion of the Firebaugh community takes part in the CSA program. Lone Willow Ranch owner John Teixeira reports that his customer base is primarily composed of educated, middle and upper class residents who have a personal interest in environmentally conscious food production. Since the price of the weekly food supply is rela-

tively reasonable according to interviews among Firebaugh residents, the lack of broader interest in CSA could be because of a lack of awareness of the program. According to Teixeira, dietary differences along cultural lines may also contribute to the hesitance of Firebaugh residents to participate in the program. The Greenlining Institute and the City of Firebaugh should inform its residents about CSA programs to allow residents to support local farming and have greater access to fresh produce.

COMMUNITY GARDENS

A third way to enhance the Firebaugh community's access to fresh fruits and vegetables is through the development of a community garden. The California Center for Healthy Cities and Communities has helped develop community gardens in a variety of cities throughout California.⁵⁵ Successful community gardens involved local leadership, volunteers and community partners as well as skills-building opportunities for participants. This also leads to public health benefits such as improved access to produce, elevated public consciousness about public health, and strengthened community building skills.⁵⁶

The Firebaugh City Manager reports that he is currently working on plans for a community garden in Firebaugh. The housing prototype for the San Joaquin Villas, a senior living facility in Gilroy, incorporated a community garden area into the development. The San Joaquin Villas development was not able to incorporate such a feature without compromising the affordability of the homes. Larger scale projects, however, may be able to feasibly incorporate such an amenity to support healthy eating habits and social cohesion. Future developments in and around Firebaugh should prioritize incorporating an area for a community garden into development plans.

These above efforts to provide improved access to healthy food for the Firebaugh community are a supplement to the existing and planned nutrition education programs in the area. For example, the Firebaugh Las Deltas Unified School District (FLDUSD) has recently implemented many programs to encourage healthy lifestyle choices for Firebaugh youth. These programs include:

- ◆ The Harvest of the Month program that exposes students to a different produce item every month
- ◆ The Federal School Wellness Program, which changed vending machine items and food sold during school hours, improved physical education classes, and provides classes on nutrition education
- ◆ Firebaugh High School has applied for a grant from the California Department of Education's "Garden in Every School" program to start a school garden project

For adults, the Network for Healthy California—Latino Campaign reports that they plan to have an educational booth at the Firebaugh Farmer's Market next year. This combination of efforts to inform Firebaugh residents about the individual and community benefits of healthy eating habits will help create a future demand for the healthy grocery retail and direct produce access options that the Greenlining Institute is pursuing in collaboration with the Firebaugh community.

CONCLUSION

As this chapter has demonstrated, access to nutritional goods is necessary for healthy lifestyles. The affordability, accessibility, quality of foods, and awareness of the benefits of healthy eating directly impact both diabetes and obesity rates among the low-income and predominantly Latino population of Firebaugh. While obesity and diabetes are impacted by choices individuals make regarding physical activity and diet, strong social forces are at work that influence those choices. Firebaugh residents make food choices based in part on convenience and price. When many of California's neighborhoods have an abundance of cheap, low-nutrient, high calorie food, and limited access to affordable fresh fruits and vegetables, meals reflect what is available.⁵⁷

Since Firebaugh only has one grocery store, City efforts to attract another grocery store may facilitate competition between the grocery retailers at the benefit of the Firebaugh consumers. The Greenlining Institute recommends, however, that these discussions have a particular emphasis on what these retailers can offer the Firebaugh community in terms of commitments to affordability, accessibility, and quality of food. It should then be a coordinated effort among residents, government officials, educational institutions, and community developers such as The Greenlining Institute to raise awareness of healthy eating. Direct access options for produce described in this chapter such as the Firebaugh Farmer's Market, Community Supported Agriculture, and community gardens should also be promoted. Such programs allow for the benefits of community engagement for healthy eating practices, the mutual support of local growers with local consumers, as well as cultivating a community dedicated toward eliminating disparities through healthy lifestyles.

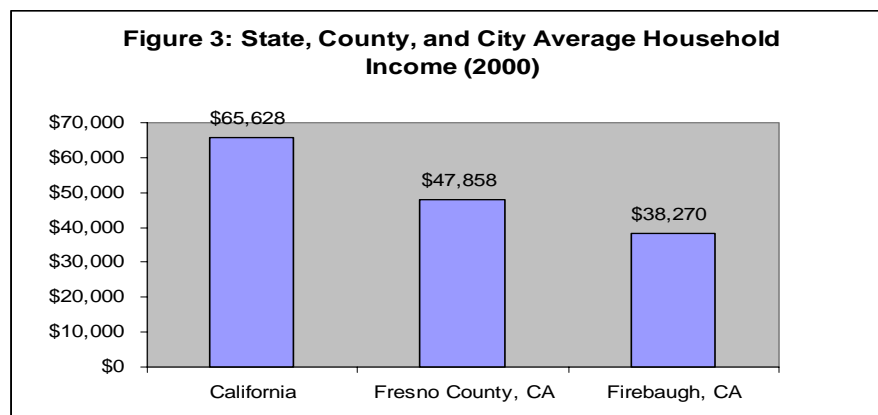
COMMUNITY EMPOWERMENT THROUGH HEALTHY EMPLOYMENT

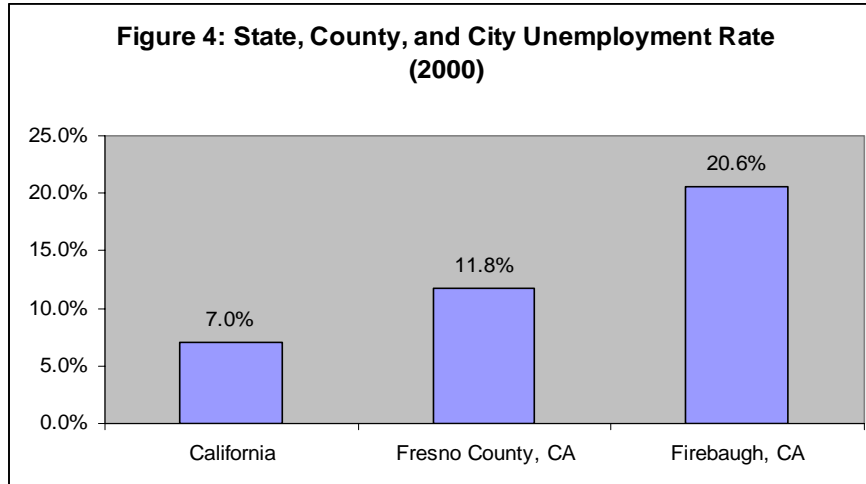


Picture taken from CA-33 outside Firebaugh. Many Firebaugh residents find transportation as a key issue in access to healthy employment.

“There is a huge need for stable jobs to stabilize the community,” remarks a Firebaugh resident when asked what he would like to see change in the city. He added that most employment opportunities in Firebaugh are informal, seasonal, and have been declining as more employers, such as the De Francesco garlic plant, have left the city. Supporting healthier employment in Firebaugh is an opportunity to improve both the economic and physical health of individuals and the community.

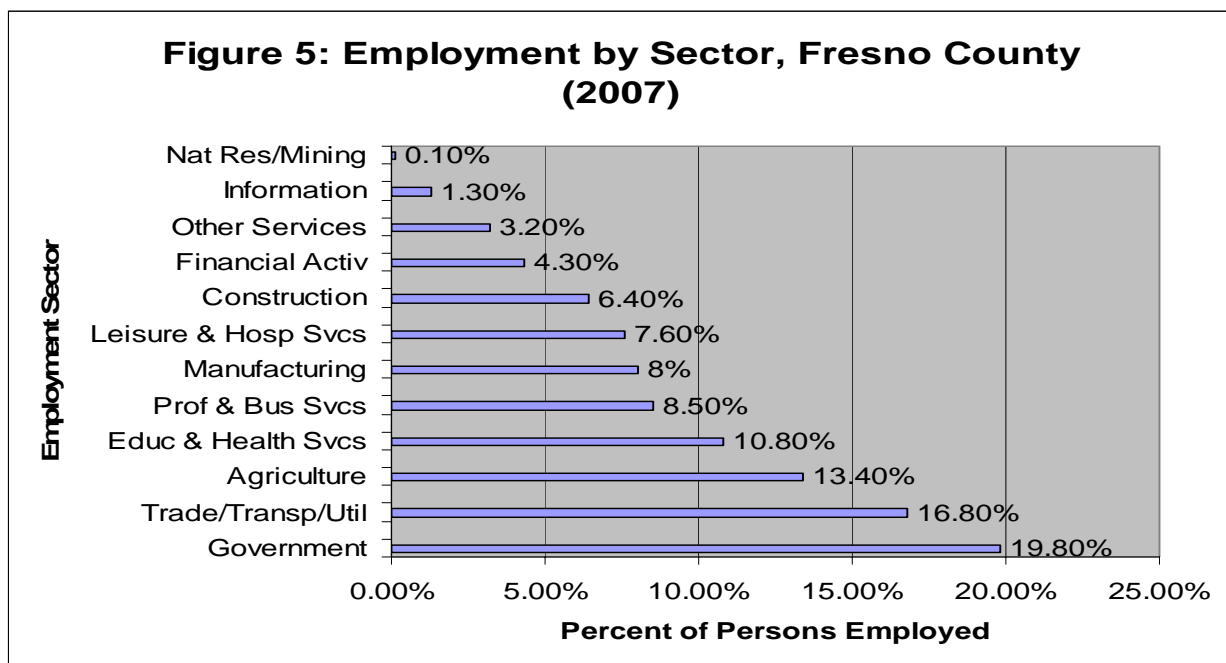
A review of public health research literature reveals that income is one of the strongest and most consistent predictors of health and disease,⁵⁸ and unemployment and underemployment is associated with numerous physical and mental health conditions, such as cardiovascular disease, hypertension, depression, and suicide.⁵⁹ Firebaugh’s high unemployment rate and low average household income, as shown in Figures 3 and 4, present a much higher risk for the physical and mental health of the city residents compared to Fresno County and California as a whole.





Healthy employment refers to the availability of jobs with sufficient and reliable compensation in the form of income and benefits,⁶⁰ safe working environment, and tasks that are appropriate for the employee's skill sets.⁶¹ This is illustrated by the fact that people with an average family income of \$15,000 to \$20,000 were three times as likely to die prematurely as those with family incomes greater than \$70,000.⁶² While the potential impact of The Greenlining Institute is somewhat limited in the arena of job creation, the institute may contribute the principles it has maintained in the 15 years that the institute has advocated for the end of "redlining."

Redlining is the practice of intentionally excluding low-income and underserved communities from gaining access to social and economic opportunities. Such practices reveal forms of internalized discrimination embedded in financial lending institutions



that may prevent minorities from accumulating wealth. Redlining may also refer to the behavior of potential employers and contractors that prevent minorities from having access to stable and adequate incomes. The Greenlining Institute's presence in Firebaugh aspires to motivate the community against practices that redline Firebaugh's most vulnerable populations.

This chapter presents a survey of existing programs in Firebaugh that intend to develop the Firebaugh community's workforce. These programs offer education, training, and small business development assistance that the Greenlining Institute may support to help advance employment opportunities for the community. Support may take the form of connecting the Firebaugh city leadership with grant opportunities and funders and drawing upon Greenlining's partners, such as the Mexican American Grocers Association (MAGA) to discuss ways that they may mutually benefit and contribute to the city's growth and well-being. Industries currently available in Fresno County are featured in figure 5.

It is important to note that migrant labor practices among those employed in the agricultural arena are key factors when looking at the issue of healthy employment in the Central Valley as a whole. Issues related to immigration, fair wages, employee treatment and exploitation are crucial issues for ensuring the good health of all those in the Central Valley. However, outside the scope of this report, a thorough analysis is still needed for future steps toward a healthier Central Valley.

Greenlining's housing development project will be a source for jobs. While Greenlining is looking to use as much local labor as possible for the San Joaquin Villas construction, the need for at least a portion of these workers to be highly trained in their field limits the ability of Greenlining to use Firebaugh labor since these skills are not readily available amongst the town's construction workforce (see fig. 5). The pressing timeline for building the homes does not provide enough time and resources for training. However, to offer more jobs for local labor, the Relational Culture Institute, one of Greenlining's many partners in this development, is working to train a more highly-skilled construction workforce for any future developments in the area.

EDUCATION AND TRAINING

A crucial step for increasing employment opportunities for Firebaugh residents is to similarly expand educational opportunities. Currently, Firebaugh adults' median years of schooling is six, only 3.4% of the population has a college education,⁶³ and 35.6% of residents 18-64 years old report that they speak English not well or not at all.⁶⁴ In addition to the six K-12 schools in the city, West Hills Community College has a North District Center located in the center of Firebaugh. The campus offers 116 courses, with about 400 people enrolled in on-campus courses and 1,600 enrolled in online course offerings.

The student population has been growing over the past few years and enrollment rates are expected to continue to increase. However, with such high proportions of

Firebaugh's population not comfortable with their English skills and at low levels of educational attainment, there are few chances for residents to ensure that they achieve adequate employment. Local schools and community programs should emphasize the value of obtaining higher levels of education while also pressuring educational institutions to offer classes at times that would be more convenient to the lower-income populations that need to work at earlier ages to earn money for their families.

The Westside Institute of Technology (WIT) is a recently formed collaboration between the Firebaugh Las Deltas, Golden Plains, and Mendota Unified School Districts and the West Hills Community College District. WIT is just starting its first classes in 2007, but it aims to become the primary job training program for Firebaugh youth and adults. Course offerings will include a truck driving school, mechanic classes, forklift certification, CPR certification, construction training, and other vocational training options that are suggested by local employers. Such vocational training programs offer Firebaugh residents the opportunity to fill workforce needs in the local area. Increasing the educational levels and vocational training opportunities of the community as a whole might also be an incentive for more industries to move to Firebaugh to take advantage of a more educated and better trained workforce.

Also located at West Hills Community College, the Workforce Connection is a program of the Fresno County Workforce Investment Board that recently moved its office from Mendota to Firebaugh. The Workforce Connection office provides two levels of service for the community. First, there is a resource room that has computers with internet access that can be used for labor market research, resume creation, online job applications, etc. The use of the resource center is free and available to anyone. Secondly, the office provides assistance services such as administering aptitude assessments, providing career plan development advice, and issuing vocational training referrals. These services are only available to residents who meet eligibility requirements, such as legal immigration status.

It is important to note the history of vocational training programs in America that have tracked minorities into skill specific jobs without providing any career development training. Career Technical Education (CTE) programs avoid tracking students by providing their students with a broader context for pursuing a career beyond learning the skills necessary to execute a job.⁶⁵ Such programs should be used as models for vocational training in Firebaugh.

Additionally, it should be noted that Fresno County, like the rest of California, is experiencing a shortage of trained healthcare professionals. An overview of the 2006 Fresno County Employment Study reveals significant demand for health practitioners, educators, support workers, home aids, service managers, and information technicians in the area. Special attention should be given to training programs in the health fields to provide the county with a trained workforce to support the growing health care needs of the area.



Shown here, a typical day at the Firebaugh Computer Learning Center.

THE FIREBAUGH COMPUTER LEARNING CENTER (FCLC)

There is also one independent education resource for Firebaugh residents, the Firebaugh Computer Learning Center (FCLC). The FCLC is a computer lab that has been open since 2002. It was started to serve low-income youth and the families living in the migrant farm worker housing development next door but has been without funding for the past two years due to a lack of capacity for development work. Despite this huge obstacle to its mission, the center has fought to remain viable and useful—it currently receives over 200 visits a week from youth and adults—by relying both on the donated volunteer time of the Executive Director, John Baltierra, and local organizations such as the Fresno Housing Authority (which provides free rent for the space) and the Firebaugh Rotary Club (which provides as much financial support as it can muster).

In an effort to benefit both the residents of the San Joaquin Villas and the wider Firebaugh community, Greenlining partnered with the FCLC to provide computer training classes for the incoming residents and to also seek joint funding which will sustain and increase the capacity of the FCLC to create new opportunities for Firebaugh's families. As a first step, Greenlining and the FCLC submitted a joint proposal for funding to the California Emerging Technology Fund (CETF) to bring in more hardware, software, and

staff support that will allow the center to increase its hours, expand its curriculum, and more effectively address the technology needs of families in Firebaugh.

Greenlining and the FCLC have also begun discussions with Street Tech, an IT job training organization from the Bay Area, and MESA, an organization dedicated to bringing math, science, and engineering skills to low-income students, to bring their specific and successful programs to Fresno. The FCLC and Street Tech entered into an agreement, contingent on funding from the CETF, to create a pilot program in Firebaugh that would make use of both a tailored curriculum and video-conferencing technology. This job training program, if successful will help workers in Firebaugh to break out of the cycle of low paying agricultural jobs and into the IT repair and maintenance jobs that provide much higher income. MESA is also currently looking into ways to incorporate more technology into their curriculum and very interested in how it can interface more with local community technology centers such as the FCLC.

A 2006 survey by the Fresno County Workforce Investment Board showed that 3,400 jobs in health care, manufacturing, logistics, construction, automotive trades, and information technology are going unfilled in the county. By helping Firebaugh harness these current and emerging employment opportunities in partnership with the centers such as the FCLC, The Greenlining Institute can positively impact the health of Firebaugh residents at an individual and community level.

CONCLUSION

Access to employment opportunities has a direct correlation with the health outcomes of a community. This chapter presents a survey of various efforts in Firebaugh to increase educational and vocational training opportunities for the residents of Firebaugh. While The Greenlining Institute has a limited capacity to address workforce issues through job creation, the institute can contribute the lessons from its 15 years of research, advocacy and policy service for the underserved. In particular, working with Firebaugh Computer Learning Center to undertake a technology needs assessment will provide the FCLC the necessary data to strengthen their grant proposals. More grants will assist in sustaining the center's capacity to assist in training Firebaugh residents in finding jobs and developing the technical computer skills necessary for employment in many industries. The Westside Institute of Technology (WIT) is an example of how the various efforts to enhance educational and vocational training opportunities must coordinate their efforts so that these programs do not stream resources toward similar ends without ensuring the maximum efficiency. As this chapter has argued, a community that can connect the various issues of health, employment, workforce development, and partnership will take a greater step toward eliminating the disparities that plague underserved communities the most.

CONCLUSION: A STEP ON THE PATH TO HEALTH



Shown here: the sun setting over the Firebaugh Farmer's Market.

This HIA is a tool that serves to inform Firebaugh's stakeholders of issues related to health and community development. Similarly, this report provides data that assists in prioritizing issues for Firebaugh city leaders and leaders from other similar cities to turn into policies or programs. Based on the primary and secondary sources of data collected for the purposes of this report, we have summarized the following recommendations:

As this report has illustrated, there is much more to health than just the absence of injury or illness. Health is a condition that is subject to multiple determining factors, among these are access to housing, nutrition, job security, transportation, education, and medical services. Although it can be overwhelming to think of the many factors that influence one's health, it is also encouraging to recognize that there are so many routes to take when seeking to serve and positively impact the health of individuals and communities.

HOUSING

Being able to live in safe homes and neighborhoods directly affects one's mental and physical health. In Firebaugh, there is a severe shortage of available rental options, and homes for sale are considered too expensive. The Greenlining Institute's development is a positive contribution toward alleviating the limited housing availability, affordability, and accessibility in the city. Future developments can be improved by incorporating additional sustainable design features, prioritizing long-term affordability for all-income levels, and incorporating linkages with existing and planned community resources.

RECOMMENDATIONS: AVAILABILITY

- Construct an adequate amount of homes with more than 3 rooms to comfortably accommodate larger Firebaugh families.
- Incorporate additional sustainable design features such as compact fluorescent lighting, low-flow fixtures and dual-flush toilets, local sources for materials, and indoor air filtration systems.
- Prioritize plans for recreation areas and community gardens in development designs to be managed by home owners associations.
- Raise density levels for residential buildings in order to make housing both more affordable and more land efficient.
- Leverage more state grants and resources toward funding city infrastructure upon demonstrating that they are growing in an affordable and sustainable way (i.e. high density).

RECOMMENDATIONS: AFFORDABILITY

- Provide financial education and first-time homebuyer courses with professional translation services.
- Offer rental options for visiting professionals and migrant workers.
- Create an inclusionary zoning plan so that at least 20% of new housing in Firebaugh is affordable to low and very low income residents.
- Provide incentives for market rate developers, who generally dislike inclusionary zoning ordinances, to work in Firebaugh by providing them density bonuses and a prioritized review session.
- Find a balanced approach to developing both affordable for-sale and rental housing according to the needs of the community.

RECOMMENDATIONS: ACCESSIBILITY

- Develop standards for development that takes input from public health professionals, planners and researchers around the linkages between housing, community resources, economic development and health.
- Encourage economic development strategies that cater to the specific needs of isolated and rural regions.

ACCESS TO HEALTHY FOOD

Having access to nutritious foods is a crucial component for having a healthy lifestyle.

There is a lack of options for healthy eating within Firebaugh with only one grocery store, a few convenience stores, and a once a week farmers' market from April to October. The Greenlining Institute is partnering with other community organizations and the city of Firebaugh to ensure that grocery retail and direct access to produce improves in the city. All such efforts should prioritize the affordability, accessibility, and quality of nutritious foods for all Firebaugh residents along with outreach efforts to promote healthy lifestyle choices.

RECOMMENDATIONS: GROCERY RETAIL

- Prioritize the sale of high-quality healthy food options that are made affordable and accessible to Firebaugh's vulnerable populations.
- Conduct more research around the benefits of attracting grocery retailers with an emphasis on culturally competent and healthy products.

RECOMMENDATIONS: DIRECT ACCESS TO PRODUCE

- Promote the use of Community Supported Agriculture (CSAs) to future residents of the San Joaquin Villas.
- Incorporate areas for a community garden in future developments to be managed by each neighborhood's homeowner's association.
- Conduct more outreach and education to residents of Firebaugh and other rural towns on the benefits of nutritious eating.
- Prioritize transportation as a key factor in accessing nutritious foods. Take in consideration the potential of sponsoring shuttle services to and from the grocery store.

JOB SECURITY

A stable and adequate income is necessary for people to afford nutritious goods, a safe shelter, healthcare, and to uphold a healthy community. Many local employment options in Firebaugh are only seasonal and sometimes informally arranged work related to agriculture. Existing employers are working closely with community-led efforts to enhance job training programs, but there is still a need to attract employers with higher-wage jobs. A significant step to attract these employers begins with education and vocational training programs. The Greenlining Institute and the City of Firebaugh should support existing education and training programs by contributing its research capacity as well as by connecting these programs with potential funding opportunities.

RECOMMENDATIONS: HEALTHY EMPLOYMENT

- Leverage resources and networks to help support existing education and training programs.
- Look at ways to bring "green industry" such as solar and wind power producers, into the area when feasible.
- Expand programs such as the Westside Institute of Technology and MESA to cultivate a more highly-trained and employable workforce.
- Continue working together to work together to produce supportive services that develop and nurture local small businesses that will in turn employ local workers.

This health assessment is a tool that serves to inform Firebaugh's stakeholders of issues related to health and community development. Similarly, this report provides data that assists in prioritizing issues for Firebaugh city leaders and leaders from other similar cities to turn into policies or programs. *Who should use this report?* Developers, city planners, community-based health and sustainability advocates, and anyone concerned with growth in the Central Valley.

The story of viewing health holistically in the City of Firebaugh is emblematic of the various other cities in the region that will face similar development choices. A community that can connect the issues of health, housing, nutrition, and employment in partnership will be more effective in eliminating the disparities that plague underserved communities the most.

To best sum up the findings of this report as well as the experience of being welcomed into the Firebaugh community, we would like to close this report with a short story:

Imagine this: you live in Firebaugh. You are one of the tens of thousands of Latinos who suffer from diabetes in Fresno County. Without medical coverage offered by your employer, you are constantly forced to choose between purchasing insulin to assist in balancing out your physical condition with choosing to pay your monthly thousand-dollar rent to preserve the roof over your family. Lacking adequate English skills, you are left unable to advance from your job and pursue a career. With no appropriate grocery in your neighborhood, your condition worsens. One day, while working too hard, you collapse from low-blood sugar and injure your leg. Because of your diabetes, the wounds cannot heal. You realize you have no way to pay for any medical care. Before collapsing again, a neighbor sees you and that you need immediate medical attention. She calls the local doctors who helped her get asthma medicine, Drs. Marcia and Oscar Sablan. Even though their practice is filled to patient capacity and closed for the day, they can never turn a patient in need away. The helpful reference from your fellow Firebaugh resident and compassion of the Sablans to assist you in your time of need reminds you of why you continue living in Firebaugh.

This story of community ties is entirely based off information compiled from interviews with members of the Firebaugh community. It does not only provide a snapshot of what life is like for someone in a rural area like Firebaugh but also conveys the complexity of the concept of health. Most of all, it explains The Greenlining Institute's intent with its participation in the Firebaugh community: to identify root causes of problems and alleviate them, together.

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