

# **Economic and Equity Analysis**

Related to the Recommendations Made in the Vision for a San Mateo County  
Food and Farm Bill Report to the San Mateo County Food Systems Alliance

Prepared for County of San Mateo Healthy System

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August 2017



# Economic and Equity Analysis

Related to the Recommendations Made in the Vision for a San Mateo County Food and Farm Bill Report to the San Mateo County Food Systems Alliance

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## I. Existing Economic Conditions in the Food and Agricultural Sector in San Mateo County

The food and agricultural sectors in San Mateo County make significant direct and indirect contributions to the overall economic vitality of the County. Many assessments of regional food economies include information often based on the nationally utilized IMPLAN regional input-output model about indirect and induced economic contributions of industries within the local economy. Agricultural Impact Associates conducted an IMPLAN analysis for San Mateo County, which considers both the contributions of agriculture to the County as well as the economic multiplier effects of business activities through spending in other related industries. According to this research, the local economic impacts of agriculture generate about \$160 million in direct economic output in San Mateo County, while \$56 million is produced as a result of multiplier effects from agricultural companies and their employees.<sup>1</sup> San Mateo County agriculture produces a wide diversity of products including nursery, fruit, vegetables, meat, and dairy products, totaling \$140 million of product value in 2012. Despite this diversity, the Nursery and Floral sector dominates by revenue, making up 81% of the total value of 2012 production.<sup>2</sup>

Another approach to defining a food economy is in terms of the North American Industry Classification system (NAICS) codes, a standardized system used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. The Bay Area Food Economy, a white paper produced by SAGE for the Association of Bay Area Governments' (ABAG) Comprehensive Economic Development Strategy (CEDS), utilizes the NAICS codes in its study of the contributions of food and agriculture to the region's economic health. According to SAGE's research for the CEDS, San Mateo County has approximately 3,500 agricultural and food sector establishments that provide roughly 400,000 jobs.<sup>3</sup> Boething Treeland Farms (a wholesale nursery), Host (an airline food service company), and See's Candy are the largest employers in San Mateo County. As a whole, San Mateo County generates about \$23.9 billion in revenue across all agricultural and food sector industries. This figure accounts for approximately 21% of the total Bay Area annual food system revenue.<sup>4</sup> The Grocery and Related Product Merchant Wholesalers category accounts for the majority of the total revenue generated countywide (\$19.9 billion), while Food Manufacturing also generates a large amount of annual revenue (\$2.4 billion). See's Candy, a major chocolate confectionery manufacturer, has its headquarters location in San Mateo County and subsequently increases the estimated revenue from the Food Manufacturing industry sub-sector in San Mateo County.

Agriculture itself provides approximately 4,700 jobs in San Mateo County, of which 3,556 jobs are induced by the multiplier effect from agriculture companies and their employees. Agricultural production directly employs 1,144 people in San Mateo County through a wide range of production jobs, including not only growing and harvesting, but also sales, marketing, and other related roles. The coast is particularly reliant on agriculture; while only 12.5% of the county's population lives on the coast, 94.1% of San Mateo

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<sup>1</sup> Agricultural Impact Associates. *Economic Contributions of San Mateo County Agriculture*.

<sup>2</sup> Agricultural Impact Associates. *Economic Contributions of San Mateo County Agriculture*.

<sup>3</sup> Dun & Bradstreet. From SAGE, *Bay Area Agriculture & Food Economy White Paper*. (2017).

<sup>4</sup> SAGE. *Bay Area Agriculture & Food Economy White Paper*. (May 2017).

County's direct agricultural economic output comes from the coast.<sup>5</sup> The nursery and floral sector is the single largest of agricultural production, comprising 81.4% of the County total.<sup>6</sup> Vegetable crops are the second largest category, comprising 12.2% of the total, followed by livestock and animal products (2.8%) and field crops and forest products (2.5%).

One interesting aspect of agriculture in San Mateo County is the high concentration of relatively small farms. Approximately 126 farms are only one to nine acres large, while 80 farms are 10 to 49 acres, and 68 farms are 50 to 179 acres.<sup>7</sup> Only 10 farms are greater than 1,000 acres. The average market value of agricultural products sold per farm is approximately \$227,212, yet this average becomes much more interesting when broken down further by the value of sales. Of those farms reporting annual sales in 2012, 117 farms made less than \$2,500, 53 farms made between \$2,500 and \$9,999, 30 farms made between \$10,000 and \$24,999, 48 farms made between \$25,000 and \$99,000, and 49 farms made more than \$100,000.<sup>8</sup> These figures illustrate a stark contrast between very small agricultural operations making little in profits and more economically profitable operations. Additionally, only 113 farms reported net gains in 2012, while 221 farms reported net losses. Of these 221 farms with net losses, farm operators reported an average net loss of income of \$28,425.

## Broader Bay Area Context

The Bay Area has a thriving agriculture and food economy, but it faces a host of complex challenges. The assets, vulnerabilities, and complexity of the food supply chain and our dependence on having access to an abundance of fresh food daily require a comprehensive understanding about our indispensable agricultural resources and food supply sectors. Equally important is understanding the interdependence of our food supply chain with regional issues such as urban and rural land use, jobs, education, transportation, goods movement, disaster preparedness, climate change and housing. While San Mateo County faces its own unique challenges, there is tremendous potential for the County to collaborate with other counties in the Bay Area region on key integrated areas. There are many efforts already underway throughout the Bay Area that address these interrelated threats. Plan Bay Area is a regional strategy to adapt to the challenges of future population growth and is jointly directed by ABAG and the Metropolitan Transportation Commission (MTC). Plan Bay Area is a comprehensive strategic plan to develop an efficient transportation network, provide more housing choices, and grow in a financially and environmentally responsible way. Another effort being undertaken by ABAG is the previously mentioned CEDS, which is being produced as a requirement for receiving a US Economic Development Administration (US EDA) designation as an Economic Development District (EDD). ABAG anticipates submitting the CEDS to the US EDA in fall 2017 and receiving the EDD designation by early 2018.

The following key areas have enormous economic implications and are highly integrated throughout the Bay Area. They are important to keep in mind throughout the remaining discussion of San Mateo County's food and agriculture economy and the recommended coordinator positions discussed in Section two below.

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<sup>5</sup> Agricultural Impact Associates. *Economic Contributions of San Mateo County Agriculture*.

<sup>6</sup> Agricultural Impact Associates. *Economic Contributions of San Mateo County Agriculture*.

<sup>7</sup> USDA. *Ag Census County Summary*. (2017).

<sup>8</sup> USDA. *Ag Census County Summary*. (2017).

## Transportation

The potential for deterioration of transportation infrastructure if maintenance and expansion do not occur is very high. Food and agriculture distribution businesses are affected by the transportation pressures facing all movement of goods in the Bay Area. As it relates to San Mateo County, transportation to markets of agricultural products is an issue since the majority of producers are located on the western side of the county, while the markets concentrated east of I-280. A large mountain range runs between the two sides of the county that greatly increases the time and cost of delivery.<sup>9</sup> San Mateo County must continue to work with neighboring counties to help ensure roads, highways, airports, ports, and bridges allow for the convenient movement of goods throughout the region.

## Urban Development

As development pressures persist in the Bay Area, meeting the demands for housing, jobs and open spaces will involve significant planning and resources at multiple levels. Housing the labor force needed to fill the low, middle, and high wage jobs required by the Bay Area economy will depend upon flexibility in land use clustering strategies to bolster the viability of regional businesses. Innovations in agriculture will be integral to sustaining the area's demand for high-quality produce and goods, making unconventional spaces such as backyard and community gardens essential to achieving regional food security. Encouraging the development of policies and funding for the development of dedicated space for co-located food manufacturers and wholesalers will also be important to ensuring the Bay Area's food resiliency. Extensive programmatic efforts are underway at the regional, county, and city levels, and offer San Mateo County helpful models for addressing its urban development.

## Climate Change

The long-term implications for agriculture and food production as a result of climate change must be addressed at a regional level, as the effects will be interconnected and potentially devastating. In a future with higher temperatures and altered precipitation patterns, ranchers will need to consider management options for grazing shorter or less-reliable seasons and for forage of questionable nutritional content. Similarly, fruit, vegetable and wine growers will need to find ways to reduce heat stress of their crops, or face lower values for their products. Agricultural producers in San Mateo County will face the same threats posed by a warming climate and rising sea levels, and must therefore work on addressing these issues within the regional context. One model San Mateo County may look to is the work of Santa Clara County's Climate Action Plan (CAP), which aims to not only reduce greenhouse gas emissions across the County, but also reduce energy and water consumption, solid waste, and fuel consumption.

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<sup>9</sup> San Mateo Food System Alliance. *Aggregating, Distributing, and Marketing Local Foods in San Mateo County, California*. (2014).

## II. Economic Analysis of Recommended Positions

In our final report we recommend up to five new positions: an Agricultural Resource Coordinator, a Farm to School Resource Coordinator, an Urban Farm & Garden Access Coordinator, a Healthy Food Access Innovations Coordinator, and a County-Wide Food & Farming Integration Coordinator. These positions could be new positions or re-purposed existing positions.

Each position would be charged with securing funds from existing public and private sources to develop programs that will demonstrate the value of investing in San Mateo Food and Farming as an integrated whole, and mobilize public support to ensure continued (and increased if warranted) funding.

Each of the recommended coordinator positions is estimated to require approximately \$250,000 annually for salary, benefits, programming, and overhead expenses. The results achieved by these positions over the course of one to five years could demonstrate the value of continuing to fund these positions on a longer term basis. The economic impacts generated by each of these coordinator positions is considered in greater detail below.

These five coordinator positions can be evaluated by simply recognizing the local employment multiplier effect (sometimes referred to as the local premium). The multiplier effect refers to the additional economic benefit accrued to an area from money being spent in a local economy – in this case, through funding the five coordinator positions. The approximate employment multiplier for state and local government positions is 2.38.<sup>10</sup> Therefore, an annual investment of \$250,000 in each of the five positions should contribute to at least \$595,000 per position in economic growth, or about \$2.975 million total. If the positions are filled from existing staff budgets then there is no additive effect merely from new employment.

### Agricultural Resource Coordinator

The financial investment in an Agricultural Resource Coordinator is relatively small compared to the economic growth it could bring to San Mateo County. This coordinator position is modelled on the Solano and Yolo counties farmbudsman program, which was launched in 2013 to facilitate and expedite the development of promising value-added agricultural projects in both counties. In particular, the farmbudsman position was anticipated to help improve the viability of agriculture as an economic generator for the region. The farmbudsman position is responsible for aiding farmers, ranchers, and agriculture-related businesses with various permitting processes, including assistance with agricultural permitting and standards require by regulatory agencies.<sup>11</sup> Within the first year of the joint farmbudsman program (2013-2014), the position contributed to a \$564,997 increase in agriculture sales across the two counties and \$620,000 in direct equity investments and loans. In this same time, the position contributed to approximately \$1.7 million of economic growth through sales and investment and \$6.5 million in economic growth through jobs added.<sup>12</sup> As of 2015, the position had added 10 new businesses, 116 new jobs, and retained 111 jobs. The position also oversaw the administration of a \$55,120 grant from the

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<sup>10</sup> Economic Policy Institute. *Updated Employment Multipliers for the U.S. Economy*. (August 2003).

<sup>11</sup> Solano County. *Solano County Farmbudsman Program*. Available at <https://www.solanocounty.com/farmbudsman/home.asp>

<sup>12</sup> Solano County. *2013-14 Solano & Yolo Farmbudsman Report*.

CDFA and helped implement changes to zoning codes so that fewer permits were needed for processing and value-added activities.

The Yolo and Solano counties farmbudsman position is also important for its “layered” economic contributions. For example, one of the primary duties of the position is helping new businesses and farming operations get started, which has a clear economic effect. A less directly measurable impact is troubleshooting assistance offered to existing farms, which may result in higher revenues for one particular farm. Another role of the farmbudsman is to help existing farms make or cultivate new sales outlets for their products, which is an important aspect of economic development for the counties. The position has had direct contact with or provided direct assistance to over 300 different operations throughout Yolo County alone, benefitting thousands of farmers and processors.

An Agriculture Resource Coordinator is integral to helping farmers and food processors keep up in changing times. For instance, the farmbudsman for Yolo County cites that new “agtech” companies are adding more complexity to the agricultural landscape, as more capital is often directed to these innovative companies.<sup>13</sup> Ensuring that current growers are not displaced by agtech or cannabis developers is also instrumental to supporting agriculture in Yolo County. The farmbudsman role is also responsible for administering special grants from federal and state sources. The Yolo County farmbudsman is currently responsible for administering a California Department of Food and Agriculture Specialty Crop Block Grant, as well as two United States Department of Agriculture grants for farm to school programming and for supporting aggregation and processing facilities growth. As the work made possible by these grants moves forward, Yolo County hopes to attract new olive oil, pistachio, cannabis, and cucumber processing facilities.

### Farm to School Resource Coordinator

Across the country, Farm to School coordinators help establish relationships between farmers and school districts while improving the health and well-being of children. Accordingly, a Farm to School (FTS) Resource Coordinator has the ability to bring about significant economic growth for San Mateo County and the County’s children. An FTS Resource Coordinator could ensure that programs are established to bolster community food security and decrease childhood overweight and obesity rates. One of the most commonly cited economic impacts of FTS programs are increased profits for local farmers, fishers, ranchers, food processors, and food manufacturers by opening doors to institutional markets. Farm to school programs also support community economic development goals by creating new jobs in school food service, agriculture and food processing, and marketing-related industries, thereby keeping local dollars recirculating within the local economy. Therefore, the economic development brought about by the FTS Resource Coordinator demonstrates the exciting opportunities of investing in such a position.

Research has widely shown that there are multiple job creation and economic activity measures that arise from implementing a FTS program. For every job created by school districts purchasing local foods, additional economic activity creates an additional 1.67 jobs on average.<sup>14</sup> Each dollar invested in farm to school programs stimulates an additional \$0.60-\$2.16 of local economic activity, while simultaneously decreasing school meal program costs. Local foods are also typically cheaper for school districts to

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<sup>13</sup> Kristy Levings. Email Conversation. (June 26, 2017).

<sup>14</sup> National Farm to School Network. *The Benefits of Farm to School Fact Sheet*. (April 2017).

purchase, though the value of strengthening connections between schools and the County's food economy is unquantifiable.

A study of a pilot FTS program in two school districts in Portland showed the ripple effects that enhanced FTS resources can produce in the local and statewide economies. In 2007, a grant provided seven cents per lunch served in two school districts in order to stimulate purchases of local food. The economic effects of this seven cent investment resulted in a total investment of \$66,193 led to \$225,869 in local purchases.<sup>15</sup> The seven cent per meal investment triggered a substantial increase in local purchasing by the two school districts, which subsequently led to increased activity in the local economy. For every dollar spent by the school districts on local food products, an additional 87 cents was spent in Oregon.<sup>16</sup> This additional 87 cents was shown to benefit 401 of the state's 409 economic sectors, highlighting the integrated nature of the local food economy.

FTS programs increase student meal participation from 3% to 16%, with an average increase of 9.3%, which generates increased revenue for schools through their administration of student meal programs.<sup>17</sup> As participation in meal programs rise, labor and administration costs remain relatively stable, allowing schools to potentially lower their per-meal costs. Increased school meal participation rates and the accompanying larger revenues can also encourage food service providers to improve their meal quality.

Increases in local procurement by school districts have shown an average increase of 5% in income for local farmers and ranchers from farm to school sales. Such arrangements also provide a long-term revenue stream for farmers; such stability can encourage small farmers to increase production of crops they do not typically cultivate. The economic benefits to farmers of FTS programs are more significant for small-scale farmers. Economists at the University of Wisconsin found that a larger amount of money is infused into the local economy when agricultural products are sourced from small farms—for each dollar earned by a small farm in Minnesota and Wisconsin, \$1.30 is generated in local expenditures, compared to \$0.90 generated in local expenditures by large farms.<sup>18</sup> As a whole, FTS programs also help form positive relationships between farmers and school districts, parents, and community members.

Similarly, a study of the value of FTS programs in Vermont found that the programming positively impacted the local economy by supporting food producers, thereby allowing them to grow their businesses and support other businesses like distributors and retail outlets. Vermont schools spent \$915,000 (only 5.6% of all food purchased) on local foods during the 2013-14 school year.<sup>19</sup> This amounts to generating an additional 60 cents to the local economy for every dollar spent on local food by Vermont schools. This spending resulted in the contribution of over \$1.4 million to Vermont's economy, which could increase to over \$2.1 million if only 75% of Vermont's schools doubled their local food spending (to 11.2%). In addition, the study found that for every additional job that directly supports food production in Vermont, an additional 1.3 jobs are created. The state is aiming to meet the goal of sourcing 50% of its school food from local farmers by 2025, which will in turn help create more local jobs.

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<sup>15</sup> Deborah Kane et al., *The Impact of Seven Cents: Examining the Effects of a \$.07 per Meal Investment on Local Economic Development, Lunch Participation Rates, and Student Preferences for Fruits and Vegetables in Two Oregon School Districts*, Ecotrust (2011).

<sup>16</sup> Deborah Kane et al., *The Impact of Seven Cents: Examining the Effects of a \$.07 per Meal Investment on Local Economic Development, Lunch Participation Rates, and Student Preferences for Fruits and Vegetables in Two Oregon School Districts*, Ecotrust (2011).

<sup>17</sup> Harvard Law School Mississippi Delta Project. *Expanding Farm to School in Mississippi: Analysis and Recommendations*. (May 2011).

<sup>18</sup> Ken Meter and Jon Rosales. *Finding Food in Farm Country*. (2001). Available at <http://www.crcworks.org/ff.pdf>

<sup>19</sup> University of Vermont Center for Rural Studies. *Economic Contribution and Potential Impact of Local Food Purchases Made by Vermont Schools*. (May 2016).



Some of San Mateo County's school districts already participate in Farm to School programs including Jefferson Elementary School District and Ravenswood City School District. These districts are two of thirteen school districts that are part of the FreshPoint Purchasing Collaborative, which collectively purchased \$177,411.20 from local family farmers between July and December 2016. The FreshPoint Purchasing Collaborative purchased 36% of its produce from California farms between August 2015 and December 2016, amounting to approximately \$980,000 in income generated by farmers.<sup>20</sup>

The contributions of an FTS Resource Coordinator would enhance the capacity of the County to improve public health measures among school-aged children. Farm to school activities support development of healthy eating habits for children, while improving family food security by boosting the quality of school meal programs. The changes in student nutrition behaviors are well documented. Such changes include choosing healthier options at school meals, consuming more fruits and vegetables through farm to school meals and at home, consuming less unhealthy foods and sodas, reducing screen time, and increasing physical activity.<sup>21</sup> When schools serve food that is locally grown, 33.1% of students eat more fruits and vegetables. The amount of fruit and vegetables consumed triples when students participate in hands-on, food-based activities. The impact of FTS programs are especially considerable for high-risk, low-income students, as diet-related diseases such as obesity and diabetes are minimized through the promotion of eating fresh fruits and vegetables. FTS programs also help improve household food security.

### Urban Farm & Garden Access Coordinator

The Urban Farm & Garden Access Coordinator would contribute to the vitality of communities throughout San Mateo County by securing resources for a range of projects including recreational gardening facilities, fostering a sense of community, and improving the environmental and general quality of life in neighborhoods. The economic impacts of engaging community members — specifically immigrants, disabled, and seniors — in urban farming include expanding employment opportunities, catalyzing entrepreneurial endeavors, and building economic independence and autonomy. A USDA report on community food projects from 2005-2009 found that over 2,300 jobs were created and over 1,000 micro-enterprise opportunities stemmed from citizens gaining experience in the projects.<sup>22</sup> An estimated 35,000 farmers and gardeners were also trained in farming, sustainable agriculture, business management, and marketing as a result of these community food projects.

Urban agriculture initiatives typically create a considerable number of jobs when implemented, and many of these programs provide basic skills training. These trainings are especially important for groups that are typically hard to employ, such as the formerly incarcerated. For example, Growing Home in Chicago has trained nearly 150 formerly incarcerated individuals on its farms since 2002, and about 60% of its program participants have been homeless.<sup>23</sup> The success of these job trainings shows the significance of investing in such community-building programs: of those who had been incarcerated, 95% did not return to jail, 90% of formerly homeless participants successfully found stable housing, and over two-thirds found full-time jobs after graduating from the program.

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<sup>20</sup> Community Alliance with Family Farmers. *San Mateo Farm to School Forum*.

<sup>21</sup> National Farm to School Network. *The Benefits of Farm to School Fact Sheet*. (April 2017).

<sup>22</sup> USDA/National Institute of Food and Agriculture. *The Activities and Impacts of Community Food Projects 2005-2009*.

<sup>23</sup> PolicyLink. *Economic and Community Development Outcomes of Healthy Food Retail*. (2013).

The benefits of community engagement in urban agriculture also include enhanced physical activity levels, better understanding of nutrition, and better access to fresh produce, which lead to cost saving on in-store purchases of produce.<sup>24</sup> There is substantial research showing that urban agriculture helps participants save money on their food expenditures by providing a local source of fresh fruits and vegetables. Some reports have shown that individual participants have saved as much as \$475 in food expenses per season, while one community garden program provided \$915,000 worth of food to an entire community over the course of a year.<sup>25</sup> These savings are particularly important for low-income residents, who have a more difficult time affording fresh produce.

At City Slicker Farms in Oakland, these anticipated community benefits are being realized. Over 92% of City Slicker Farms' garden participants stated that they saved money because of their garden, while 62% reported that they grew half or more than half of their families' produce in their gardens.<sup>26</sup> Community gardens can also become significant economic generators when gardeners select the right crops and utilize proper growing techniques. The economic multiplier for investment in community gardens is rather large: every \$1 invested in a community garden plot yields around \$6 worth of produce. Even on a small scale, this multiplier effect can be significant. One urban market gardener in Philadelphia earned up to \$68,000 in revenue per half acre, while Ohio State University estimated that community gardeners could gross up to \$90,000 per acre.<sup>27</sup>

The economic benefits of community garden projects are also seen through positive effects on surrounding property values. A study of 54 community gardens in St. Louis, Missouri found that median rent, median housing costs (mortgage payments, maintenance costs, and taxes) for owner-occupied housing, as well as the home ownership rate all increased in the immediate vicinity of the community gardens relative to surrounding census tracts.<sup>28</sup> Gardens in poorer neighborhoods can provide an affordable alternative to city parks, which are frequently located in more affluent neighborhoods. Therefore, urban gardens may be more valuable to less affluent communities, leading to even larger positive impacts on residential property values in lower-income neighborhoods.

One study of the impacts of a typical community garden on residential property values in New York City found that gardens have a positive impact on surrounding properties, and that these values grow steadily over time.<sup>29</sup> For properties immediately adjacent to the garden site, a \$3,607 increase in median property values was seen one year after garden completion, growing to \$6,551 five years after completion. For properties 500 feet from the garden site, the five year average increase in residential property values was \$4,111, while properties 1,000 feet from the garden site saw an average increase in property values of \$1,670 after five years. The positive benefits that community gardens can have on surrounding property values are especially significant and immediate for lower-income communities. The study also found that for properties located in low-income areas, the increase in property values within 1,000 feet of a community garden was \$4,618 within a year of garden completion, while the impact after five years is a \$7,071 increase. The finding that community gardens deliver larger benefits to lower-income neighborhoods is an important consideration for the potential impact that an Urban Farm & Garden Access Coordinator could have for low-income residents of San Mateo County. The same New York City

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<sup>24</sup> University of Alberta. *Planting Roots: Urban Agriculture for Senior Immigrants*. 2010.

<sup>25</sup> UC Sustainable Agriculture Research and Education Program. *Urban Agriculture Impacts Literature Review*. (November 2013).

<sup>26</sup> PolicyLink. *Economic and Community Development Outcomes of Healthy Food Retail*. (2013).

<sup>27</sup> PolicyLink. *Economic and Community Development Outcomes of Healthy Food Retail*. (2013).

<sup>28</sup> Ioan Voicu and Vicki Been. *The Effect of Community Gardens on Neighboring Property Values*. *Real Estate Economics* 36.2: 241-283. (2008).

<sup>29</sup> Ioan Voicu and Vicki Been. *The Effect of Community Gardens on Neighboring Property Values*. *Real Estate Economics* 36.2: 241-283. (2008).

study estimated that the average value of benefits generated by properties within 1,000 feet of a garden totaled \$2 million per garden, while providing \$563 million in gross tax benefit from all community gardens to the City over a 20 year period. These figures indicate that investments in community gardens have a considerable payoff for communities as well as cities, which can realize additional property tax revenues from neighborhoods with community gardens.

The Urban Farm & Garden Access Coordinator could also help San Mateo County implement Assembly Bill 551 – the Urban Agriculture Incentive Zones Act – which allows landowners leasing land for urban agriculture to lower their property taxes. Since the passage of AB 551, San Francisco, Sacramento, San Jose and Santa Clara County have opted into the program and passed local laws establishing urban agriculture incentive zones. These zones can help spur important growth in urban agriculture, while the loss to county and city property tax revenues is minimal. In San Francisco, community management of vacant lots transformed into urban agriculture sites allowed the San Francisco Department of Public Works to save approximately \$4,100 annually per site by preventing acts of vandalism, dumping, and eliminating other labor-intensive maintenance costs.<sup>30</sup> Developing vacant lands into garden space is also less expensive than developing parks, in part because gardens require less land and nearly 80% of the cost of gardens is in labor, which can be provided by community volunteers. Because community gardens are observed and managed by community gardeners, they result in a cleaner space than a vacant lot and a more active local community, all at little or no cost to cities. Community gardens are recognized by many police departments as an effective community crime prevention strategy, helping one neighborhood in Philadelphia reduce burglaries and thefts by 90% with the introduction of community gardens on previously vacant lands.<sup>31</sup>

The potential health and lifestyle benefits of increasing urban farms and gardens within San Mateo County are considerable. Studies have shown that residents who participate in community gardens tend to eat more fruits and vegetables on a daily basis, and that this benefit is felt more substantially in low-income communities. A survey in Flint, Michigan found that only 17.8% of respondents from non-gardening households ate fruits and vegetables at least five times per day, while 32.4% of respondents in households with a gardener ate the recommended amount of daily fruits and vegetables.<sup>32</sup> Other studies have shown that community gardens also provide a host of mental health benefits, which can be particularly helpful to veterans and those with mental and physical disabilities. For example, simply being in a natural setting can help foster recovery from mental fatigue, improve outlook and life satisfaction, reduce stress, and improve concentration and productivity.<sup>33</sup> Therefore, the Urban Farm & Garden Access Coordinator could play an instrumental role in enhancing the quality of life for seniors, veterans, and County residents recovering from illness and injury.

Community gardens and farms also offer important opportunities for immigrants in San Mateo County. Research has found that community gardens provide effective spaces for first and second generation immigrants to maintain their cultural farming practices.<sup>34</sup> Community gardens allow immigrants to transmit their cultural heritage, which in turn can help garden participants build their self-esteem and sense of self-sufficiency, while also providing space for immigrants to cultivate culturally appropriate

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<sup>30</sup> SPUR. *Public Harvest*. SPUR Report, 1-36. (2012).

<sup>31</sup> Gardening Matters. *Multiple Benefits of Community Gardening*. (2012).

<sup>32</sup> Gardening Matters. *Multiple Benefits of Community Gardening*. (2012).

<sup>33</sup> Gardening Matters. *Multiple Benefits of Community Gardening*. (2012).

<sup>34</sup> Jill Florence Lackey & Associates. *Evaluation of Community Gardens: A program of the University of Wisconsin Cooperative Extension*. (1998).

foods. In a place as culturally diverse as San Mateo County, where nearly half of the County identifies as Hispanic/Latino or Asian, it is essential for cross-cultural communication to occur. Community gardens can be a space for people of different cultures and backgrounds to come together, learn from one another, and express and celebrate their cultural heritage.

One community garden seeing these possibilities through by achieving both economic and cultural gains is Nuestras Raíces (“Our Roots”) in Holyoke, Massachusetts. The Nuestras program oversees nine community gardens and one youth garden, and serves 100 Puerto Rican families by helping them rediscover their food culture by helping maintain strong agricultural ties. Each family produces over \$1,000 in produce annually, while also gaining general business skills.<sup>35</sup> To date, the program has helped create two dozen food and agriculture businesses that have generated an estimated \$2 million in economic activity. Community garden programs are therefore important not only for the increased revenues they provide to participants, but also for the cultural connections they facilitate for immigrants.

### Healthy Food Access Innovations Coordinator

The Healthy Food Access Innovations Coordinator would play a critical role in addressing the gaps in equitable food access among residents of San Mateo County at all income levels. Available discretionary income; time to grocery shop, cook and clean; and access to kitchen facilities and cookware are critical components of healthy food access for low-income individuals and families throughout San Mateo County. However, there is little evaluation of these metrics within the County, putting low-income citizens at greater risk of being overlooked when it comes to having the ability to access healthy foods. In particular, coastal farm workers living in temporary housing are susceptible to crowded living conditions with limited kitchen access and vulnerable food storage environments. Therefore, a Healthy Food Access Innovations Coordinator would be an important advocate for ensuring these workers receive targeted programming to better meet their nutrition needs, thereby addressing the multifaceted issue of equity in healthy food access.

This Coordinator position would also be instrumental in helping to advertise SNAP and WIC benefits so that the public is better informed of their eligibility. One program that could be implemented by the Coordinator is a subsidized SNAP/WIC CSA (Community Supported Agriculture) box, such as the “Bonus Bucks” CSA at the Community Foodworks (CFW) Farmers Markets in Washington, D.C., where customers who receive SNAP or WIC are eligible for a reduced fruit and vegetable box. In its pilot year, about 40 needy families received a 75% discount on their weekly fruits and vegetables, allowing them to receive enough fresh food for at minimum three adults for only \$8 (compared to \$33 retail). In 2016, CFW distributed more than \$45,000 in matching funds to thousands of low-income customers through its discounted foods program, showing the transformative power of programs intended to increase access to healthy foods.<sup>36</sup> Given the established correlation between people of low income with health issues such as diabetes and obesity, promoting healthy food access among recipients of SNAP and WIC would help to address healthy equity issues across the County.

The economic benefits of healthy food access, particularly through retail developments like grocery stores, include generation of jobs and local income as well as improved home values with greater access

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<sup>35</sup> PolicyLink. *Economic and Community Development Outcomes of Healthy Food Retail*. (2013).

<sup>36</sup> Community Food Works. *Programs*. Available at <http://www.community-foodworks.org/>

to grocery stores. Other economic impacts of encouraging healthy food access through retail development include preventing leakage of local dollars (i.e. the amount of dollars that flow out of one local economy into another) and creating induced effects (i.e. how the economic activities of one industry are linked to other industries within the local economy). Grocery stores generate direct effects on local economies through the activities related to operation, management, packaging, and shipping, while indirect effects are felt when these activities require purchases of goods and services such as building materials from local suppliers and when workers spend their wages in the local economy.

One example of the economic benefits of investing in healthy food access is the Pennsylvania Fresh Food Financing Initiative, which is a public-private partnership that has developed or improved 88 supermarkets and fresh food outlets in underserved rural and urban areas throughout the state since its launch in 2004. Since then, it has created or retained over 5,000 jobs in underserved communities while helping improve healthy food access for more than 400,000 Pennsylvania residents.<sup>37</sup> Just one store in urban Pennsylvania generated \$540,000 in local tax revenue. Leveraging state funding has been a successful strategy, as the state's initial \$30 million in seed money was leveraged into projects amounting to over \$190 million. The Fresh Food Financing Initiative continues to substantially enhance access to healthy food statewide, while also driving purposeful long-term economic development for the state. Such an approach to investing in fresh food outlets can serve as a meaningful example to San Mateo County. In fact, the state of California passed legislation to codify its own Healthy Food Financing Initiative, which has raised over \$260 million for healthy food retail in underserved communities through low-interest loans, equity investments, and grants. Taking advantage of such existing funding opportunities would be a critical function of the Healthy Food Access Innovations Coordinator.

The role of the food industry in Vermont in another illustrative example of the impact of investment in the local food economy. For example, the jobs and economic stimulus related to construction and renovation of grocery stores can be significant. Between direct and induced impacts such as construction, Vermont's food industry is responsible for nearly 15% of the state's overall economy, directly creating 13,780 jobs and generating \$3 billion in statewide economic activity.<sup>38</sup> In the year 2011 alone, the food industry was credited for 95 construction jobs, which generated nearly \$4 million in wages and had over \$9 million in economic impact. Given the relatively high median income in San Mateo County, the Healthy Food Access Innovations Coordinator would have the ability to broadly impact the economy, both directly and indirectly.

Expanding smaller retail operations such as corner stores and bodegas are workable strategies that also offer economic stimulus in areas where new full-service grocery stores are not always the most feasible option for improving healthy food access. This strategy could be particularly helpful for low-income people living in "food deserts" in San Mateo County, as corner and convenience stores often are the primary outlet for redeeming SNAP and WIC benefits. While corner stores are not the same economic powerhouses as full service grocery stores, they still contribute a significant amount of economic activity. In addition, these stores often serve low-income communities and can have a significant economic impact in improving healthy food access while still being profitable. Studies of corner stores have shown that

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<sup>37</sup> PolicyLink. *Economic White Paper*. (2013).

<sup>38</sup> PolicyLink. *Economic White Paper*. (2013).

profit margins on fresh produce, dairy, and bread range from 25-50% while profit margins can be more than 100% for prepared healthy foods such as pre-cut fruit and salads.<sup>39</sup>

The Healthy Bodegas Initiative is an example of helping various New York neighborhoods with high rates of poverty and chronic disease target corner stores and convenience shops to expand healthy food options among underserved communities.<sup>40</sup> Prior to the initiative, leafy green vegetables could only be found in 4% of bodegas in Harlem. Since the initiative, 26% of stores reported increased sales of vegetables while 32% of stores reported increased sales of fruits. Overall, 78% of bodegas reported increased sales of healthier foods.

## County-wide Food & Farming Integration Coordinator

Given the broad goals and challenges addressed in the positions recommended above, a County-Wide Food and Farming Integration Coordinator could provide important guidance and coordination among these positions so that they do not operate in silos. An overarching coordinator could help to enhance and support the work of the four issue-specific coordinators, and would also be expected to have the same, if not greater, economic impact given the interconnectedness of these issues.

In order to help strengthen the state's food systems, Vermont passed its Farm to Plate Investment Program (F2P) legislation in 2009, which helped answer the call for a coordinated statewide approach for making new, strategic investments in the food and farm sectors. As a result, the F2P helped organize a network of over 350 organizations, state agencies, and key funders. The goals of the legislation are to increase economic development of Vermont's farm and food sector, improve healthy food access, and create sustainable jobs in the farm and food economy. The F2P has been incredibly successful in providing an overview for development of the agriculture and food economies. As a result of the coordinated effort in Vermont, the consumption of Vermont-produced foods has increased internally, consumers in institutional settings have increased their consumption of Vermont-produced foods, and Vermont residents have exhibited fewer diet-related health problems.<sup>41</sup>

The reach of the F2P has been quite significant to date, as the program has conducted substantial stakeholder outreach with farmers, land trusts, regional development corporations, growers associations, and non-profit organizations. The initiative is credited with creating 5,387 new jobs over its first five years and having an overall positive impact on the state's food economy; the number of jobs in the food system is approximately 64,000. According to the 2015 F2P annual report, food system gross sales experienced an increase of 32% from \$7.6 billion in 2007 to \$10 billion in 2012.<sup>42</sup> Local food purchases also increased by \$189 million between 2010 and 2014, while the of households that were insecure decreased to about 12.6% compared to higher levels seen throughout the Great Recession. These encouraging economic indicators of a coordinated investment in Vermont's statewide food system are illustrative of the positive contributions that a County-Wide Food and Farming Integration Coordinator could have, given the interrelated challenges San Mateo County faces.

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<sup>39</sup> Siedenburg, K. et al. *Healthy Corner Stores Q&A*. (2010).

<sup>40</sup> New York City Dept. of Health and Mental Hygiene, Center for Economic Opportunity. *New York City Healthy Bodegas Initiative*. (2010).

<sup>41</sup> Vermont Sustainable Jobs Fund. *Farm to Plate Investment Program Interim Report to Legislature*. (January 18, 2010).

<sup>42</sup> Vermont Sustainable Jobs Fund. *Annual Report, Year 5, Fiscal 2015*.

While each of the four functional coordinator positions are necessary to help leverage funding from existing public and private sources to develop programs needed throughout the County, the County-Wide Food and Farming Integration Coordinator would ensure that the broad vision of the San Mateo County Food and Farming systems is sufficiently realized. A coordinator tasked with county-wide food system planning can also help measure and track overall economic development resulting from greater investment in the farm and food sectors. This coordinated approach to implementing the County's goals would be instrumental in harmonizing the multiple goals and values incorporated in each of the four previous coordinator positions.

### III. Understanding Equity in the Food System

Though the topic of equity may not immediately seem to relate to food and agricultural systems, considerations of equity are in fact integral to how these systems are constructed and operate. In the United States we have established individual rights related to equality under the law, but there is no established right to food. This challenges us as a society since a system in which all people do not have adequate access to food is inherently inequitable. As it relates to San Mateo County, it is concerning that nearly 12% of residents have low access to grocery stores, while SNAP benefit redemptions continue to increase. These trends indicate a critical need for equity to take a central role in a Food and Farm Bill so that San Mateo County's poorest are sufficiently accounted for. The issue of land ownership, and ownership of the means of production and distribution, are also central to understanding equity. While all individuals have the same claims to equality under the law, land owners and business owners have inherently different opportunities to build wealth and to influence local government. In order to discuss equity in food and agriculture we have to face the conflict between a desire for universal access to nutritious, healthy food, and the economic and legal reality that the means of production and distribution – land, infrastructure, and equipment – are primarily in the hands of individuals whose economic rights to use their assets to generate income are well established, and only minimally limited. To aid decision-makers in navigating this territory we begin our analysis with a discussion of different definitions and understandings of the concept of equity.

The Latin origin of the word itself means *equal*. Equity in modern usage has multiple meanings, all of which have bearing on how the food system of San Mateo County can be understood. Equity is primarily described as *freedom from bias or favoritism, or dealing fairly and equally with all concerned*.<sup>43</sup> In this sense, equity is a statement of equality, wherein all people have full and equal access to opportunities that enable them to realize their full potential. It is important to keep in mind that different societies have different perceptions of what is equitable, and these social and cultural norms shape the policies that are adopted to promote equity.

Equity is inextricably intertwined with democratic social values in U.S. policy, where equity is seen as a worthy goal in and of itself due to its moral connotations and connection with fairness. Historically, heightened awareness of the discrimination faced by certain groups because of their gender, race, or ethnic origin focused attention on the need to ensure that these groups have equal access to government services and receive fair treatment in the labor market. Thus, equity can be understood as upholding the *equal opportunity* to thrive, not as dictating uniformity among individuals. Equity should be aspired to so that everyone in society has a legitimate chance at living a comfortable life, while being able to contribute to society, regardless of the situation one is born in. Mitigating inequities where possible helps lead to greater social cohesion, which in turn leads to a more productive society. Because this conception of equity is aspirational, it is often difficult to measure in non-economic terms. There are also more technical definitions of equity that are more easily measurable, such as *the money value of a property or of an interest in a property in excess of claims or liens against it*.<sup>44</sup> Given the variation in how equity can be conceived, its social, economic, and political aspects are considered in greater detail.

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<sup>43</sup> Merriam-Webster Dictionary. *Definition of Equity*. Available from <https://www.merriam-webster.com/dictionary/equity>

<sup>44</sup> Merriam-Webster Dictionary. *Definition of Equity*. Available from <https://www.merriam-webster.com/dictionary/equity>



## Social Context

Social equity recognizes that some people are at a larger disadvantage than others, and aims to compensate for these disadvantages by ensuring everyone can access the same resources, which are frequently provided through public administration. In a social context, equity can be thought of as equal access to programs, information, and opportunities such as education, libraries, and parks. For example, public education is provided to all school-aged students in the U.S. regardless of race, class or income (though the quality of public education can differ), indicating a system of fairness and inclusion. Charitable programs also play a role in ensuring social equity, as many charities seek to eradicate recognized inequities by taking extra measures to help those who are in greater need. For instance, charitable foundations may target scholarships to students from low-income families, or provide informational services and literacy programs to English as a second language speakers. Equal employment opportunity is another aspect of social equity, where various agencies oversee the administration and enforcement of laws against workplace discrimination based on race, religion, gender, age, disability, and other characteristics. Social equity is put into practice through the mechanisms that legally prevent employment discrimination based on these attributes.

## Economic Context

The economic definition of equity is a straightforward assessment of ownership and net worth. Equity is the key to understanding the basic accounting equation:

$$\text{Assets less Liabilities} = \text{Equity.}$$

In accounting parlance “equity” and individual net worth are the same concept; an individual’s net worth is their equity in their assets.

Historically, equity was also used to refer to a set of legal principles established in England that existed alongside common law, which recognized equity as ownership of real property. Under this definition, only those who owned land were considered to have equity, indicating a strong preference for utilizing wealth and ownership as a prerequisite for individual rights.

## Governmental and Political Context

The idea of equity within government and politics refers to equitable representation in leadership roles, decision-making, and other activities that have a broad impact on those being represented. This sense of equity can broadly be understood as the efforts made to ensure that representation reflects the composition (i.e. racial, gender, etc.) of those being represented. This has not typically been the case in the U.S., where diversity in elected and non-elected positions is lacking, from state legislators and city councilmembers to fire chiefs and school board supervisors. Women and minorities are often missing from important leadership roles at city, state, and federal levels. Although women make up more than half of the U.S. population, they account for only a fifth of U.S. representatives and senators.<sup>45</sup> While elected officials and their staffs undoubtedly care for the constituents they serve, there is a clash with equitable principles when, as a whole, the composition of representatives does not mirror the diversity

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<sup>45</sup> AP News. *Women a Minority of U.S. Elected Officials*. (July 25, 2016).

of those being represented. Non-governmental boards (such as those for non-profits and private companies) also face a variety of stakeholders, particularly the clients they serve and those that provide the necessary resources to enable the organization's existence. However, research finds that for nonprofits, board members are predominantly white, yet non-white clientele make up a disproportionately large number of those who depend on their assistance.<sup>46</sup> This is especially important to note, as equitable demographic representation is thought to translate into better advocacy for client needs, particularly when board members and staff comprise the demographics being served.<sup>47</sup>

## Existing Equity Conditions

Similarly to the preceding discussion of existing economic conditions in San Mateo County, this section will focus on a multiple aspects of equity. First, existing health and well-being indicators will be explored, including: 1) food access, 2) food assistance, 3) health and physical activity, 4) agricultural workforce needs, and 5) vulnerability to climate change. Then, consideration will be given to the ownership of the means of production along the agricultural supply chain.

### Health and Equity

#### *Food Access: Grocery Stores & Fast Food Restaurants*

One important measure of equity in San Mateo County relates to food access, as access is the foundation for the positive benefits associated with healthy food. Without access to healthy foods found at grocery stores and other fresh food retailers, a nutritious diet and good health are out of reach. And without grocery stores and other fresh food outlets, communities are missing the critical commercial vitality that makes neighborhoods livable and helps local economies thrive. Neighborhoods can either help promote and sustain healthy lifestyle patterns, or contribute to the development of unhealthy behaviors, resulting in chronic health problems. The problem of low access to healthy foods is often particularly acute in low-income communities and communities of color, which face higher rates of obesity and other diet-related diseases. Low access among low-income and minority populations has also been linked with higher density of fast-food restaurants and convenience stores.<sup>48</sup>

Of San Mateo County's total population in 2010 (718,451 persons), 11.5% had low access to grocery stores.<sup>49</sup> Low access is defined as the number of people living more than 1 mile from a supermarket, supercenter, or large grocery store if in an urban area, or more than 10 miles from a supermarket or large grocery store if in a rural area. Of particular importance to note is that low-income persons with low access to a grocery store comprised 1.5% of San Mateo County's total population. Meanwhile, children with low access to grocery stores comprised 2.6% of San Mateo County's population, while seniors with low access to grocery stories comprised 1.7% of the County's population. Households with no car and low access to stores made up 0.3% of the population.

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<sup>46</sup> Independent Sector. *The New Nonprofit Almanac and Desk Reference: The Essential Facts and Figures for Managers, Researchers, and Volunteers*. (2002).

<sup>47</sup> Wilkins, Vicky M and Keiser Lael R. *Linking Passive and Active Representation for Gender: The Case of Child Support Agencies*. *Journal of Public Administration Research Theory*, 16:87–102. (2006).

<sup>48</sup> Angela Hilmers, David C. Hilmers, Jayna Dave. *Neighborhood Disparities in Access to Healthy Foods and Their Effects on Environmental Justice*. *American Journal of Public Health*.

<sup>49</sup> USDA. *Economic Research Services Food Atlas*.

As of 2012, there were 174 grocery stores in San Mateo County – an increase of 1.75% since 2007.<sup>50</sup> The proportion of grocery stores per 1,000 people was 0.24 in 2012, which is a decrease of 4% since 2007 due to the County’s growing population. There were 4 supercenters and club stores and 137 convenience stores in 2012, representing a decrease of 10.5% in convenience stores since 2007. This decrease of convenience stores is somewhat promising from an equity point of view, as a higher density of convenience stores has been correlated with a higher prevalence of obesity among low-income and minority populations.<sup>51</sup> Specialized food stores also decreased by 33.7% from 86 stores in 2007 to 57 stores in 2012.

Fast food restaurants in San Mateo County increased by 7.3% from 494 outlets in 2007 to 530 outlets in 2012. Per capita expenditures on fast food increased significantly between 2002 and 2007 – a total of 42% from \$534 to \$761.40. Given the racial and income disparities and exposure to fast food outlets across the United States, both the number of outlets and per capita spending increases are concerning from an equity perspective.

### *Food Assistance*

The Supplemental Nutrition Assistance Program (SNAP) administered by the U.S. Department of Agriculture Food and Nutrition Service offers nutrition assistance to low-income individuals and families. Between 2008 and 2012, the average number of SNAP redemptions by SNAP Authorized stores increased 134% from 87,677.2 to 205,571.8 redemptions. While 7.2% of the County’s population participated in SNAP in 2009, the number of participants increased by 2014 to 11.2% of the County’s population. On a per capita basis, SNAP benefits increased by 139% from 1.61 in 2008 to 3.85 in 2010. SNAP-authorized stores increased by approximately 47% from 171 to 251 between 2007 and 2012.

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides grants to states for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk.<sup>52</sup> Per capita WIC redemptions decreased by 15% from 15.4 in 2008 to 13 in 2012. Additionally, the percentage of the population participating in WIC decreased slightly from 3.9% in 2009 to 3.5% in 2014. The total number of WIC redemptions at WIC authorized stores decreased by 38% from 213,530.8 in 2008 to 130,462.9 in 2012. Over this same time, the number of WIC-authorized stores increased by 45% from 51 stores to 74 stores. While a decrease in per capita and total WIC redemptions may seem to indicate lesser need among the target population, it would be incorrect to assume that need among this population has decreased. Rather, these increases may simply indicate lower rates of program utilization.

Participation in the National School Lunch Program decreased slightly from 8.6% in 2009 to 8.4% in 2014. Similarly, for reduced price lunch, the percentage of students eligible decreased very slightly from 6.7% in 2006 to 6.6% in 2010. However, the percentage of students eligible for free

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<sup>50</sup> USDA. *Economic Research Services Food Atlas*.

<sup>51</sup> Angela Hilmers, David C. Hilmers, Jayna Dave. *Neighborhood Disparities in Access to Healthy Foods and Their Effects on Environmental Justice*. American Journal of Public Health.

<sup>52</sup> USDA Food and Nutrition Service. *Women, Infants, and Children (WIC)*. Available at <https://www.fns.usda.gov/wic/women-infants-and-children-wic>

lunch increased by substantially from 20.6% in 2006 to 29.4% in 2010, indicating a 42% increase.

### *Health & Physical Activity*

As previously stated, access to grocery stores and fresh, healthy food is vital to ensuring physically healthy communities. In San Mateo County, the adult diabetes rate has risen an astonishing 156% since 1983 to 10.0% as of 2013.<sup>53</sup> National research finds that African American and Latino adults are 1.3 to 1.9 times more likely to have diabetes than are white adults.<sup>54</sup> In keeping with this research, the rate of adult diabetes in San Mateo County is higher among African Americans (14.9%) and people living under 200% of the federal poverty level (17.9%).<sup>55</sup> Diabetes is also much more prevalent in seniors (23.1%) compared to young adults (2.4%). These figures illustrate the racial and income-related disparities in health that are easily visible at the county level, and are cause for concern about equitable food access.

While both the rates of overweight and obese adults have risen since 1999, the adult obesity rate for the county has skyrocketed by 150% between 1999 and 2013 to 24.1%, while the population that is overweight and obese has increased by 8% to 55% of the population in 2013.<sup>56</sup> The Asian/Pacific Islander population had the lowest rate of overweight (46%) and obese (12%), and African American and Latinos reported the highest rates of overweight (60%) and obese (30%). Meanwhile, the white population reported rates of 56% and 21% obese. Among low-income preschool children, the obesity rate was 17.5% in 2011, while 25% of children in the County are overweight or obese.

Another interesting trend to note is a decrease in the number of recreation and fitness facilities across the County. In only five years, there was a decrease of 12% from 108 facilities in 2007 to 95 facilities in 2012. The fraction of recreation and fitness facilities per 1,000 people dropped to only 0.13 in 2012, illustrating the limited opportunities for County residents to utilize a fitness facility. In addition to accessibility issues like transportation and location preventing the use of fitness facilities, price is also a limiting factor. The average gym membership in San Mateo County costs around \$40-80 per month, though initiation and other miscellaneous fees can set back an individual as much as \$800 per year. Even the YMCA costs \$67 per month for an individual with a \$99 initiation fee, and \$128 per month for a household with children, not including the \$149 initiation fee.<sup>57</sup> These prices are beyond the reasonable monthly budget for low-income residents of the County, who are also the most highly impacted by diet-related diseases such as diabetes and obesity. While financial assistance is offered by some organizations such as the YMCA, the process of applying for scholarship funds can be enough to prevent community members from even attempting to join a fitness facility.

### *Agricultural Workforce Needs*

Just as the rest of the Bay Area struggles to affordably house its growing workforce, San Mateo County struggles to house its agricultural workforce. According to a report from the San Mateo

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<sup>53</sup> San Mateo County. *2013 Community Health Needs Assessment*.

<sup>54</sup> Carol R. Horowitz, Kathryn A. Colson, Paul L. Herbert, Kristie Lancaster. *African American and Latino adults are 1.3 to 1.9 times more likely to have diabetes than are White adults*. *American Journal of Public Health* v.94(9). (Sept. 2004).

<sup>55</sup> San Mateo County. *2013 Community Health Needs Assessment*.

<sup>56</sup> San Mateo County. *2013 Community Health Needs Assessment*.

<sup>57</sup> The Peninsula Family YMCA. *Membership Types*. Available at <https://www.ymcasf.org/locations/peninsula-family-ymca/membership-types>

County Department of Housing, there is an unmet need for approximately 1,020 to 1,140 affordable housing units for agricultural workers and their families.<sup>58</sup> Due to the high cost of construction and the relatively high concentration of small farm operations with limited cash flow, many of San Mateo County's agricultural producers would not be financially capable of funding improvements to existing housing, let alone construction of new housing. While producers would like to hire more agricultural workers, a key reason preventing them from attracting additional labor is the unavailability of affordable housing, particularly on the Coastsides. The inequities faced by agricultural workers in San Mateo County are clear when it comes to housing:

- Agricultural workers living in on-site/on-farm housing reported that they would be reluctant to end an unsatisfactory employment situation due to their lack of viable housing options, should they leave their employer-provided housing.
- Agricultural workers are subjected to living in substandard or overcrowded housing conditions as they prioritize earning money to save and/or send to their families.
- Families are at a disadvantage compared to unaccompanied agricultural workers, as there is far less suitable housing for families with children compared to housing for only one person.

As a result of these housing barriers, many agricultural workers live in overcrowded housing, often in need of repair and apart from their families, out of their desire to make a living.

#### *Vulnerability to Climate Change*

San Mateo County is frequently cited as one of the most vulnerable regions of the Bay Area to climate change.<sup>59</sup> According to the Draft Sea Level Rise Vulnerability Assessment Report for San Mateo County, near-term flooding could cost more than \$1 billion in damages, while long-term flooding and erosion could cost about \$39 billion.<sup>60</sup> Beyond the dire implications for San Mateo County's infrastructure and natural resources, climate change will also threaten public health by impairing healthcare facilities and causing environmentally unhealthy and unsafe conditions. San Mateo County's poorest residents face the greatest harm from climate change: rising sea levels are expected to disproportionately impact the socially vulnerable, such as people of color, the young and elderly, and those without stable living conditions. Preparing a comprehensive climate change mitigation strategy is therefore of great importance to protecting these populations, as they do not have the same resources as wealthier populations to protect themselves from the impacts of climate change.

San Mateo County residents who rent their homes or live in residences with poor construction, bad air quality, or inadequate ventilation are at greater danger from climate change than homeowners; lower-income residents and the young frequently rent at higher rates than those with higher incomes. Residents who do not speak English also face higher risk, as they may not understand directions to evacuate in case of an emergency. Those without health insurance or means of transportation beyond what is publicly provided also have higher vulnerability to climate change because they lack the ability to adapt to quickly changing conditions. As a whole,

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<sup>58</sup> BAE Urban Economics. *San Mateo County Agricultural Workforce Housing Needs Assessment*. (October 21, 2016).

<sup>59</sup> Sea Change San Mateo County. (2017).

<sup>60</sup> County of San Mateo. *Sea Level Rise Vulnerability Assessment Report*. (April 2017).

these risk factors are indicative of a trend wherein already vulnerable populations of San Mateo County will be most affected by climate change and sea level rise.

### Supply Chain Ownership

Taking a close look at the owners or production and inputs along the agricultural supply chain gives valuable insight into the state of equity in San Mateo County agriculture. This section focuses on ownership of agricultural operations and land; critical input suppliers including machinery, physical inputs, and knowledge; and food business operations including food trucks and restaurants as well as infrastructure such as terminal markets and commissary and commercial kitchens.

#### *Agricultural Operations*<sup>61</sup>

The USDA Census of Agriculture program reports on the tenure, ownership, and transition of agricultural lands, collecting data from landowners and landlords of agricultural land. San Mateo County contains approximately 10,377 acres of agricultural land and cropland (excluding pastureland and woodland), with around 1,890 acres of agriculture and cropland sitting idle. The tenure status of agricultural operations include 119 operations with full owners, 30 operations with part owners, and 53 operations with tenants who rent from owners. The average asset value to owners of agricultural land, including buildings, was \$9,340 per acre. The amount of harvested agricultural land privately owned and rented to others by farmers and ranchers (operator landlords) totaled 4,323 acres. The amount of agricultural land privately owned and rented to others by landlords who do not operate a farm (non-operator landlords) totaled 2,284 acres. It is also interesting to note that of the acreage operated by females, 81.8% are full owners, 15.2% are part owners, and only 3% are tenants.

*Note: Unfortunately, the remaining 6,600+ acres were not identified by tenure type. Non-operator landlords include those who rent out land individually or as participants in a variety of ownership arrangements (partnership, trust, corporation, municipality, limited liability company, etc.).*

#### *Food Business Operations*

San Mateo County houses some of the most critical infrastructure serving food businesses at multiple scales. Terminal markets offer a central location for agricultural commodities to be bought and sold, and are typically near major transportation hubs. The Golden Gate Produce (GGP) Terminal Market in the north San Mateo County near the 101 is the largest produce terminal market in Northern California, responsible for moving 15 million packages through the market on an annual basis. The 742,000-square foot facility employs about 475 workers and is open to the public in addition to the restaurants it regularly serves. Twenty-three independent and family-owned businesses operate at the GGP Terminal Market, including wholesalers, commission merchants, brokers, foodservice distributors, and processors. The GGP Terminal Market provides vital linkages between farmers and markets by shortening the supply chain and enhancing efficiency, thereby increasing farmers income. Another important aspect of the GGP Terminal Market is its specialization in providing products for a wide range of demographics, including Asian, Latino, Indian and Middle Eastern consumers.

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<sup>61</sup> The data cited throughout this section is from the 2014 USDA National Agricultural Statistics Service Tenure, Ownership and Transfer of Agriculture Land survey.

## Best Practices for Creating Equity in Organizations

There is a great deal of literature on best practices for ensuring equitable principles are integrated into the processes, programs, and leadership of organizations. When an organization's staff recognize that disparities exist in an organization and view such inequities as needing to be addressed, then an organization is said to have a strong "culture of equity." While developing a culture of equity can be challenging, investing in equity has significant benefits for an organization.

### Nonprofit Context

Multiple studies have shown that across the nonprofit sector, approximately 84% of the leadership is white, while younger nonprofits tend to be less diverse than more established nonprofits.<sup>62</sup> Furthermore, only 14% of nonprofit board members are people of color. While many nonprofit professionals believe their employers value diversity and inclusion, these values are not transformed into actions that actually result in greater workplace diversity. There also seems to be a barrier preventing people of color from moving upward in nonprofit management: people of color hold only 15% of deputy director positions, and only 10% serve as executive directors.<sup>63</sup>

### *Who Owns a Program?*

The trend of disproportionately white leadership is particularly concerning because the clientele of most nonprofit organizations is frequently composed of people of color. When an organization serves a community that has no representation within the staff, let alone its leadership, important questions of equity as ownerships are raised. For example, imagine a food bank helps feed hungry people in a community of color, yet no one from the community being served has a direct linkage to the food bank. Due to financial pressures the food bank stops operating, terminating the nutritional resources offered to the community by the food bank, possibly with devastating consequences. Because the food bank wholly "owned" the program, there were no mechanisms for community members to advocate, or potentially help, with its continued existence. By failing to include community representatives in its programming efforts, the food bank had little tangible ties to the community it served, and people cannot expect to go hungry. However, if the food bank had a culture of equity – leadership or staff identified with the community's needs, community members were integrated on advisory boards – then the program may not have met its demise. In this example, creating equity relates back to the definition of equity as ownership: when community members being served by a program have a say in its administration, equity can be better realized by a nonprofit organization.

### *Equitable Representation*

There are many best practices that can be utilized by those in the nonprofit sector to make valuable change throughout an organization. First, without a clear and comprehensive commitment to equity reflected with actionable, successive steps, nonprofits will have difficulty recruiting and retaining diverse employees. However, once an organization has pledged to create a culture of equity, the following steps can be taken to widen an organization's perspective and help develop a more diverse workforce:

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<sup>62</sup> Commongood Careers. *The Voice of Nonprofit Talent: Perceptions of Diversity in the Workplace.*

<sup>63</sup> Commongood Careers. *The Voice of Nonprofit Talent: Perceptions of Diversity in the Workplace.*

- Take stock of who, and who is not, at the leadership table when decisions are being made, and consider what policies or biases may have led to inequitable representation.
- Contract outside advisors, or partner with a more diverse organization on projects to supplement experience and perspective.
- Develop mentorship and internship programs that target applicants outside your typical networks to engage younger and more representative talent.
- Strengthen relationships with partners to build talent pipelines from specific professional associations, educational institutions, cultural societies, and alumni networks.
- Create advisory boards consisting of multiple perspectives that supplement and feed into the governing board.
- Utilize constituency community-building strategies to bring the voice, experience, and leadership of the constituency being served to leadership tables.
- Make time and resources available for mentoring or coaching staff members on equity, diversity, and leadership.

While this is by no means an exhaustive list of best practices, these strategies should convey some of the key actions to begin creating a culture of equity in a nonprofit organization.

### Local Government Context

The best practices for creating a culture of equity in local governments is similar to the approach for nonprofits, yet local governments often have more resources to systematize processes that strengthen equity. Efforts to support equity can be made in both programming efforts and leadership. King County, Washington is an excellent example of integrating equity into its departments and agencies by implementing policies and institutional practices to build equity. Rather than focusing on programs to treat outcomes at the individual level (i.e. obesity, homelessness, incarceration, etc.) King County recognizes that inequities are systemic, and seek to address the underlying determinants of equity (i.e. class and gender bias, intergenerational poverty, structural racism, etc.).<sup>64</sup> King County officials have compiled a variety of tools and resources for its departments to help strengthen a culture of equity, including an “Equity Impact Review” tool that evaluates the potential impact (both positive and negative) of a policy or program on equity. By putting equity at the forefront of governance, community engagement strategies, and even administrative tasks like procurement, King County has successfully integrated equitable principles into decision making at every level.

Creating equity among government leadership continues to be an issue nationally and globally, which inevitably translates to equity issues at the local level. As previously mentioned, women are still a minority in the U.S. Congress, with about 20% of seats in both the House of Representatives and the Senate. However, women of color are only 7.1% of the total members of Congress, and 36.5% of the women in Congress.<sup>65</sup> Only six current U.S. governors are women, and only one is a woman of color. Approximately 25% of U.S. state legislators are women, and women hold just 23.7% of statewide elected executive positions in the country. Men hold the majority of city council positions, though women hold 44% of positions in some cities including Detroit, Pittsburgh, San Diego, and Washington, D.C. While women’s share of U.S. state positions is growing, men still firmly occupy the majority.

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<sup>64</sup> King County Executive. *Equity & Social Justice: Vision*. (November 2014). Available at <http://www.kingcounty.gov/elected/executive/equity-social-justice/vision.aspx>

<sup>65</sup> Catalyst. *Women in Government*. (February 15, 2017). Available at <http://www.catalyst.org/knowledge/women-government>



In addition to advancing gender equity in leadership, many local governments are making efforts to increase racial equity to the benefit of the entire community. The City of San Jose is exceptionally diverse, with 35% of its population identifying as White, 31% as Asian, 28% of Hispanic, 2% Black, and 3% two or more races. Its City Council certainly reflects this diversity – the current council is comprised of the first Chinese American, the first Indian-American, and the first Vietnamese American to serve on the council.<sup>66</sup> This example of diversity in representative composition is a promising development for the City, as these councilmembers can help advocate for policies that serve the ethnic communities they represent.

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<sup>66</sup> Team San Jose. *San Jose Demographics and Diversity*. (2017).

## IV. Equity Analysis of Recommendations

The following analysis briefly examines the equity implications of each of the recommended coordinator positions. To the extent possible, each position is assessed based on 1) the fair and just distribution of benefits and burdens to all affected parties and communities, 2) the process by which stakeholders and decision makers produce operational outcomes, and 3) cross-generational considerations of equity, particularly the burdens faced by future generations. In keeping with previous analysis, it must be noted that the candidates for the recommended coordinator positions should have a clear and demonstrated understanding of social, economic, and political equity so that working relationships can be effective. In addition, the hiring process of qualified candidates should follow the best practices for establishing equity outlined above

### Agricultural Resource Coordinator

The principal focus of the Agricultural Resource Coordinator is to strengthen and develop the position of agriculture throughout San Mateo County. Because this position is intended to contribute to economic growth in the agricultural sector, it can be expected that this position will primarily benefit those in agricultural production, particularly those who own agricultural land. Secondary benefits may be gained by agricultural workers and surrounding communities through the economic multiplier effect, but these secondary benefits will not be on the same scale as the benefits gained by agricultural land owners. Therefore, this position does not promote distributional equity, as the benefits gained from the work of this coordinator will not be shared equally throughout San Mateo County. However, process equity can be ensured by including agricultural stakeholders at multiple levels – particularly those who lease agricultural land – in decision making by the coordinator. This position also has the capacity to create guidelines for assisting beginning farmers, thereby enhancing the prospect for future generations of farmers in San Mateo County.

### Farm to School Resource Coordinator

The Farm to School Resource Coordinator has the ability to promote equity for both farmers and school children in San Mateo County. This coordinator could help establish new markets for farmers, which would be especially helpful for beginning farmers looking to reach local markets and establish deeper relationships with non-coastside communities. In the context of improving health among school children, research has shown that more wealth is typically associated with higher intake of fruits and vegetables. By increasing students' access to fresh fruits and vegetables through farm to school programs, it is likely that less affluent students will benefit to a greater extent (essentially “catching up” with more affluent schools). This could dramatically help improve health indicators among low-income students, for whom FTS programs have been shown to minimize the propensity for diet-related diseases like obesity and diabetes. The coordinator would need to systematize a decision-making process that incorporates the perspectives of beginning farmers, schools in low-income communities, and other stakeholder groups eager to see more fresh food in schools in order to ensure process equity is attained. In helping to secure productive relationships between farms and schools, this coordinator position has the ability to transform the landscape of the future of FTS programs in San Mateo County. The relationship building between these two entities could prove to have significant positive benefits for future generations of both farmers

and children, making this position an exciting component of achieving a more equitable food system in San Mateo County.

### Urban Farm & Garden Access Coordinator

As is the case with most urban agriculture initiatives, the Urban Farm & Garden Access Coordinator would be responsible for developing programming with a social component intended to benefit the public. Historically, many urban farms and gardens are run by nonprofits in low-income areas, while those designing and implementing farm and garden programs often come from higher educations and incomes. Therefore, it is important that the coordinator bring significant experience in working in low-income communities and/or communities of color so that equity can be adequately integrated into program elements. This is especially important for urban farm and garden programs intended to serve populations such as veterans, immigrants, the formerly incarcerated, and the homeless. By creating a firm foundation of equity, this coordinator position has the potential to enhance community engagement and substantially improve access to fresh produce among low-income communities in San Mateo County. However, if the coordinator does not include community members in decision making, particularly in siting and membership protocol decisions, there is a strong likelihood that urban farm and garden projects will evolve to serve the more affluent communities in San Mateo County. Therefore, process and operational equity should be of great concern to this coordinator. Finally, this position can meaningfully contribute to considerations of generational equity by establishing productive green spaces for future generations of San Mateo County residents to enjoy.

### Healthy Food Access Innovations Coordinator

By addressing the gaps in equitable food access among residents of San Mateo County at all income levels, the Healthy Food Access Innovations Coordinator is a clear investment in promoting equity. This coordinator would play a pivotal role in improving access to federal nutrition assistance programs, infrastructure such kitchen facilities, and retail outlets that sell fresh fruits and vegetables. Increasing any of these measures would have significant benefits for low-income residents and communities of color in San Mateo County. While more affluent communities may also benefit from the expansion of grocery stores, the primary focus of stimulating access to healthy foods will have the most consequential benefits for low-income communities. As with the previous coordinator positions, leaders from the communities intended to be served should be engaged throughout the decision making process. Enhancing access to healthy food among currently underserved communities will have important generational benefits.

### County-wide Food & Farming Integration Coordinator

This position encompasses aspects of the four positions described above, and supports all of the positions described above. As a result, the equity analysis is the same – this position will be essential to addressing equity issues across the food and agricultural sectors in San Mateo County.