THE CITY OF MILPITAS INNOVATION DISTRICT

Jessica de la Paz, Sophia Sole, Joe Lou, Yvonne Hong

Stanford University

Acknowledgements

We would like to acknowledge and thank Professor Deland Chan, our community partners Alex Andrade and Daniel Degu, Christina Briggs, and Stanford University

TABLE OF CONTENTS

Executive Summary ……..3
Introduction ……..5
Context……5
Drivers ……5
Innovation Districts……6
Case Studies……8
Zoning and Economic Development……9
Early Establishment……9
Proximity as a key determinant for economic growth……...10
Mixed-use facilities and the importance of placemaking……9
Concerns……11
Suggestions……12
Community Engagement……13
Strategies……13
Meeting Needs……...17
Suggestions……17
Social Equity……19
Issue Identification……19
Context……...20
Housing Issues……...20
Other Considerations……21
Suggestions……21
Funding……22
Uncertainties…….…….....22
Suggestions……23
Conclusion……23
Appendix……...24
Works Cited……..33

Executive Summary

The City of Milpitas is expected to grow significantly as employees of major companies like Google and Facebook expand past Menlo Park and Atherton to find affordable housing. An innovation district would address this housing crisis in a socially, environmentally, and economically equitable way. The structure of an innovation district encourages creative collisions and fosters a sense of community to create an environment that meets the need of such a diverse community.

This paper uses the Boston Seaport District and the Fremont Warm Springs Innovation District to better understand best practices that made the former successful and the latter reflective of the broader Bay Area ecosystems. Key suggestions taken from this study are described below:

Community Engagement	**Participate** in community-led grass roots initiatives such as school or library-focused approaches to gain support and input, given the insufficiency of public planning meetings and public availability of proposed plans **Provide** alternative means of community engagement (e.g.: online surveys, student-programs) to address and overcome issues and concerns **Implement** a variation of Boston's "community brokers" to creatively and effectively advertise in a community **Proactively increase** community support by recognizing the need for amenities and placemaking in residential areas **Prioritize** building physical infrastructure to facilitate startup growth **Emphasize** community programming as a means of facilitating creative collisions and increasing community cohesion **Address** accessibility concerns regarding different income levels
Social sustainability	**Limit** the extent of gentrification by building on raw land with few initial residents, as in the case with the Warm Springs district

	Monitor and regulate market forces that increase living expenses and rent as the development of venture capital and tech opportunities attract higher-income earners **Acknowledge** the diversity of languages and cultures in Milpitas **Encourage** the development and expansion of the service industry **Negotiate** with stakeholders to invest in equitable education
Economic sustainability	**Incorporate** government and corporate financing as an alternative to solely driving economic growth through government funds **Think** creatively when city planning and consider innovative ways to maximize housing and encourage entrepreneurial events

Introduction

Context

Nestled east of the Silicon Valley and in the shadow of growing tech giants like Google and Facebook, the city of Milpitas holds key importance for future development. As those companies continue to expand and attract more workers, they necessitate space: housing, parks, schools, hospitals, etc. Indeed, for every one of these company workers (dubbed "DINKs", or Dual-Income, No Kids by many) five service jobs are also created—an expansion that inherently requires growth and innovation in infrastructure.

The Bay Area's population is expected to grow from 7.2 million to 9.3 million by 2040 (MTC), in tandem with, and as a product of, the Silicon Valley tech boom. This begets the questions: where and how will these people live? How will they commute to their jobs? How can this influx be maintained and even encouraged in a socially, environmentally, and economically equitable way?

The city of Milpitas holds an integral place in this Silicon Valley tech industry. It is the 18th highest city in California in terms of patents generated, with 375 patents filed in 2016 (Top 20 Patent Generating Cities). Some of these patents came from the two existing startup accelerators in the area – Startpad, which focuses on the manufacturing and light industrial businesses Milpitas has traditionally been known for, and FalconX, which expands Milpitas' industrial frontier with software-based technology startups in areas like IoT, AI, and cloud computing ("A B2B tech community…", "Silicon Valley's Incubator…"). These developments show the market demand and resource availability needed to economically support an innovation district. On the other hand, ongoing and recently completed housing development projects such as The Fields, Landmark Towers, and Summer Hill will ensure that an educated and creative workforce will be available to sustain the businesses of the district ("Development Projects").

Drivers

In the Bay Area alone, more than 20 public transportation systems riddle the cities, many of which lack inter-system coordination, and the exorbitant housing prices in addition to the limited housing infrastructure created a dearth of equitable and feasible options for individuals and families to live in the area. As a result, the number of super commuters (people who drive more than three hours per day) as well as average commute times (ACT) rose. The increased cars

on the road consequently drove up congestion and pollution in nearby cities, and particulate matter from vehicle transmissions correlates with a larger percentage of the population diagnosed with asthma and air related health issues (*"*Asthma & Air Pollution"). With such a significant percent of the population commuting out, residents' tax revenue instead transfers to these commuter cities, leading to tax revenue leakage.

The City of Milpitas addressed this issue by integrating the Bay Area Rapid Transit System (BART) and the Valley Transportation Association (VTA) into its city planning, and by building both market-rate and affordable housing in its neighborhoods. It has not, however, brought the type of high-quality jobs synonymous with the Silicon Valley. Thus, by taking advantage of the expanding tech sector, Milpitas is uniquely positioned to absorb the population growth and to capture these high-quality jobs, revitalize economic output, and address the issues linking the housing crisis to job demand and transportation inadequacies through the creation of an Innovation District along its innermost artery.

Innovation Districts

The rapid progression of technology has necessitated innovation districts as a means of disseminating knowledge, and in turn turning knowledge into a tangible marker for power and progress. By co-locating work, social life, and home, innovation districts provide workers with a self-sufficient, sustainable community in which all they need is readily and conveniently available. This network has ties at school, the grocery store, the gym, as well as in the work place. Centralizing these different components of life and blurring the distinctions between their compartmentalization allow innovation districts to become home to creative collisions. Developing new contacts and defamiliarizing coworkers and work material allows residents "to mix and combine different types of knowledge from different sources with their own knowledge stocks" (Huggins and Thompson)—that is, to find new intersections and build bridges between what they know and what they can gain from their peers; innovation districts provide the environment conducive to latent learning, encouraging and creating the opportunities for productivity to occur outside the work place.

Moreover, the collaboration between firms and universities diffuses knowledge to inhibit economic slowdown, and spurred by advancements in the private sector and through government policies, innovation districts capitalize on human capital to drive success. Senior fellow at the

Metropolitan Policy Program at the Brookings Institute Julie Wagner and coauthor of *The Metropolitan Revolution* Bruce Katz describe "innovation ecosystems" as the intersection of economic, networking, and physical assets (***Figure 1***). Within these systems, high value research orientation combines with formal training focused facilities such as offices and proof of concept centers. Further, the plethora of formal and informal meeting areas—the parks, streets, social settings endowed by the city and urban planning of an innovation district—foster interactions and encourage innovation and curiosity (Baily and Montalbano). Much like college campuses, innovation districts seek to maximize collaboration and interaction between people with different perspectives, both within the office and in casual settings. Through this structure, innovation districts cultivate creativity and curiosity as a common way of thinking and living.

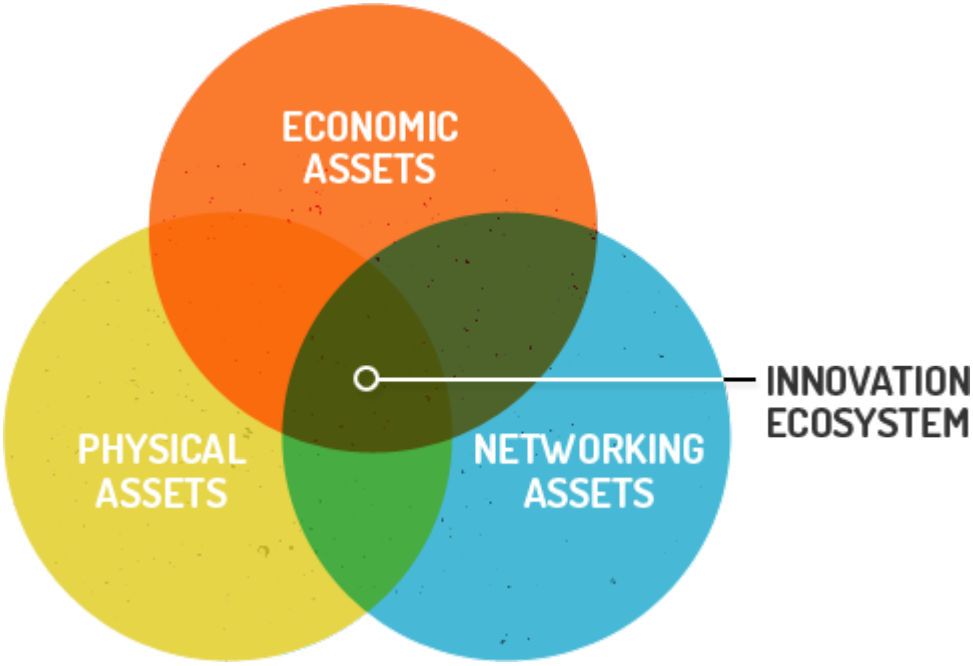

Figure 1. An innovation district lies at the intersection of economic, physical, and networking assets. Source: Wagner, Julie and Bruce Katz, *Brookings Institute*, 2014.

It is the growth of network capital that so dramatically differs from traditional economic development. Instead of emphasizing the individuality of cubicles and permitting the loss of productive time from long commutes, innovation districts co-locate their facilities. Such proximity engenders knowledge spillovers and intentional interactions to converge different

thoughts, ideas, and sectors, thereby combatting slow growth, urban sprawl, and inefficient land use.

The Silicon Valley is the tech capital of the world, and innovation districts encompass a means of sustaining and enhancing its success. It must, therefore, meet the needs of innovation--adequate infrastructure, strong business opportunities, and a strong culture of ambition and advancement—while still accommodating the current and target population.

Case Studies

This paper focuses on the Boston Sea Port Innovation District and the Fremont Warm Springs Innovation District. By comparing and analyzing the two, we hope to provide a comprehensive and holistic overview of applicable best practices that could be reimagined in the Milpitas Innovation District.

The Boston Sea Port district, created in 2010, is perhaps the best known and oldest innovation district, therefore providing us with insights into the long-term impacts and effects. Fremont, although much younger, can provide valuable lessons as to what creating an innovation district in the context of the Bay Area can look like, especially with regard to suburbanization and the manufacturing base, the high east and southeast Asian immigration population, and the wide range of socioeconomic levels.

Zoning and Economic Development

Early Establishment

Typically, innovation districts find anchors in research parks or through universities. The Boston Seaport district instead anchored its space with the city itself. Mayor at the time Thomas Menino capitalized on the changing atmosphere of the waterfront and worked with local real estate agents and the start-up accelerator MassChallenge to bring over 100 companies and 200 mentors to Seaport, and with them, job opportunities (Baily and Montalbano). Development was aided by the Big Dig highway project, which connects Seaport to downtown.

Fremont finds its anchor in the Tesla factor on its south border, as a major supplier of jobs. The designated area for the district is largely used for housing, but the existence of a BART station in walking distance makes it an attractive location for potential residents.

Proximity as a Key Determinant for Economic Growth

The proximity between businesses increases economic benefit. In his study on agglomeration economies, Syracuse University Professor of Economics and Senior Research Associate Stuart S. Rosenthal describes localization effects: they have the greatest attenuation over the first few miles due in part to the frequent contact between workers over a short distance, with small establishments having a greater attraction to potential new comers than larger establishments (Rosenthal). Similarly, the appearance of company clusters promotes "competition and cooperation", according to Harvard Business School professor Michael Porter, in his article "Clusters and the New Economics of Competition." Repeated exchanges alongside market competition foster coordination and trust, and the type of integration and coordination inherent to innovation districts allows the horizontal sharing of knowledge and technology. This maximizes the benefits from economies of scale and minimizes the risk of employee relocation, making these clusters ideal locations for businesses.

Boston's Sea Port District has taken advantage of these observation in its 1.6km long route, importing businesses like General Electric, Vertex, and John Hancock Financial. Fremont, similarly anchors development with the Tesla factor. By creating a location where both large and small businesses can flourish side by side, these locations encourage foot traffic and have become (or have the potentially of becoming) busy, hot-button locations.

Mixed-use Facilities and the Importance of Placemaking

More significant, however, is housing and amenities zoning, for those supply the work force that keep businesses booming. Unlike other innovation districts, Seaport combines commercial retailers with restaurants and residences in mixed-use locations. The high density combined with mixed-use connects the community not only with a specified area but with the larger ecosystem. Public spaces further bolster these sentiments by providing areas for informal interactions in which work and recreation can co-mingle, and new technologies can be readily tested. Fremont, conversely, did not take advantage of this opportunity and instead has shifted focus primarily to residential units to address the housing crisis. Although a school is currently being constructed in the area, the district lacks the leisure spaces and open-air walkways that have made the Seaport district so appealing.

Indeed, these aspects contribute to placemaking, an integral aspect of a regional identity. Boston's tree-lined Harbor Way links the waterfront to the center of district and provides access to the "public green oasis amidst one of Boston's densest neighborhoods" (Hoban), making it an iconic destination for Bostonian residents, and when creating the Seaport district, Mayor Menino encouraged a variety of different establishments to experiment with new ideas in the area as a means of providing a unique character and atmosphere ("The Development of Boston's Innovation District"). In an interview with Christina Briggs, the chief economic advisor for the Fremont Warm Springs Innovation District, we learned of the efforts to "weirdify" Fremont. In an homage to the Austin, Texas epithet "Keep Austin weird," the Bay Area district seeks to draw in new residents by creating a similar sense of belonging and uniqueness. Street names like "Wisdom Ave", "Success Comm," and "Challenge Way" add to the unique character of Warm Springs (**Figure 2**). Such an identity tethers the community and in turn increases its desirability and people's willingness to contribute to the area.

Figure 2. Street intersection in Fremont during construction. Source: Jessica de la Paz, 2019.

Concerns

With the newness of innovation districts and the desire to modernize them with the expanding tech sector, low and even middle-income workers run the risk of being priced out in favor of young DINKs and other upper-class tech workers. Retailers, too, struggle to keep up with the rising cost of rent. In Boston, homes sell for $200,000, but that money cannot be realistically used in South Boston; many churches and schools are being torn down and replaced with multimillion-dollar condos (Ng). Not only does Boston lack adequate housing, it also lacks public transportation and pedestrian/bike friendly infrastructure, preventing it from accommodating the dense development (ibid). While the Seaport District provides entrepreneurs and retails with a significant economic opportunity for success, it is ultimately socially unsustainable.

On the other hand, the Fremont Warm Springs innovation district has overemphasized public housing and has allotted the majority of its land to housing development, leaving little for economic expansion and innovation. Though yet to be completed, one can expect such a community to develop a neighborhood-feel without the rapid technological advancements expected from an innovation district, and unless the housing market is regulated, one can also

expect resident displacement as upper- and upper-middle income workers seek a more centralized location to their offices, either in Milpitas or accessible through BART.

Suggestions

- **Regulate** and set aside space for outdoor amenities and other social locations such as restaurants, bars, and shops, given that open spaces and parks are as integral for placemaking as housing
- **Capture** future jobs by enacting measures that require ground level retail space and general business construction
- **Convert** land from light industrial to mixed-use zoning to encourage new development and incentivize existing owners to move elsewhere so that the area can be used more productively
- **Integrate** housing within the innovation district and alongside the businesses and amenities being offered
    - **Convert** pockets of low density, low utilization businesses (e.g.: public storage) to more productive spaces, and;
    - **Offer** adequate compensation and an alternative space for their relocation
- **Limit** extent of gentrification and curb incidences of the initial community being driven out (due to potentially increasing standards of living, as caused by the influx of high-income earners flocking to tech businesses) by creating affordable housing units (at least 15% of residences)
- **Expand** current bike and pedestrian infrastructure in tandem with accessible transit alternatives

Community Engagement

Strategies

For successful implementation, the City of Milpitas must be cognizant of the diversity and needs of its communities and must thus strategize and effectively integrate a community engagement plan. According to the Department of Sustainability and Environment at the Victorian Government, successful engagement 1) reduces misconception and misinformation, 2) fosters relationships between developers and the community, and 3) encourages information sharing and commitment. Intrinsic to any community engagement strategy is trust. Not only will community engagement benefit those in the communities, it will empower those individuals and increase support and buy-in for the project.

Boston's model of social engagement included social infrastructure as they created the innovation district. They transitioned from newspaper and television ads to social media and a social media manager to interact with those in the district in person and online. Most significantly, they used "community brokers"—informal volunteers from the community who built connections with and between entrepreneurs and other community members to understand and address their needs. Their participation created the buy-in those in district planning commission needed to promote their work and to strengthen community ties. For example, one community broker engaged with non-profit organization Friends of Fort Point Channel and built a network between community members and newcomers as new businesses were being added ("The Development of Boston's Innovation District"). Such engagement fostered cross-sector relationships that allowed the Seaport district to take root and flourish.

By the same token, however, Fremont has struggled to "weirdify" its innovation district and increase buy-in from its community. According to our conversation with Christina Briggs, this may in part be due to difficulty effectively engaging its community or its market community. Demographically, 54% of the Milpitas population is older than 35, and only a small percentage comprise young adults: 20.3% are between the ages of 20 to 34. (Full population demographics can be found in the appendix.) Innovation districts, however, by incorporating start-ups and entrepreneurial businesses, target a younger audience. Whereas the Boston Seaport district found success as an urban center with over half the population under the age 34, the Warm Springs District draws from an older, family oriented, suburban environment. The issues in marketing a unique identity in Fremont may stem from this difference. Milpitas, with similar age

demographics as Fremont, must take this into consideration when creating their community engagement model; not only should they appeal to an older audience, but they must balance that with incentives for DINKs and other young adults to move into the city.

The City of Milpitas must also be cognizant of the distance and lack of infrastructure currently in place. Sans pedestrian and bike-friendly roadways and conveniently located amenities, community engagement may not initially take the form of traditional programming; calling town meetings when these halls are not readily accessible will not garner much of an audience. Instead, focusing programming on social media efforts and appealing to the younger generation may have farther reaching effects.

Social media platforms increase access to a wider audience given the frequency of use by both millennials and boomers. A 2018 Pew Research survey found that 68% of Americans use Facebook, 71% of Americans aged 18-24 use Instagram, and 88% of Americans between the ages of 18-29 use some type of social media; this falls to 78% for individuals between 30 and 49 years old, 64% between 50 to 64 years, and 37% among senior citizens (**Figures 3-5**). Creating digestible content for these users would accomplishes three major goals: 1) to inform community members of what the innovation is and what it hopes to accomplish, 2) create a platform for developers to ask for input, 3) and to provide an outlet for interested individuals to voice their opinions and requests.

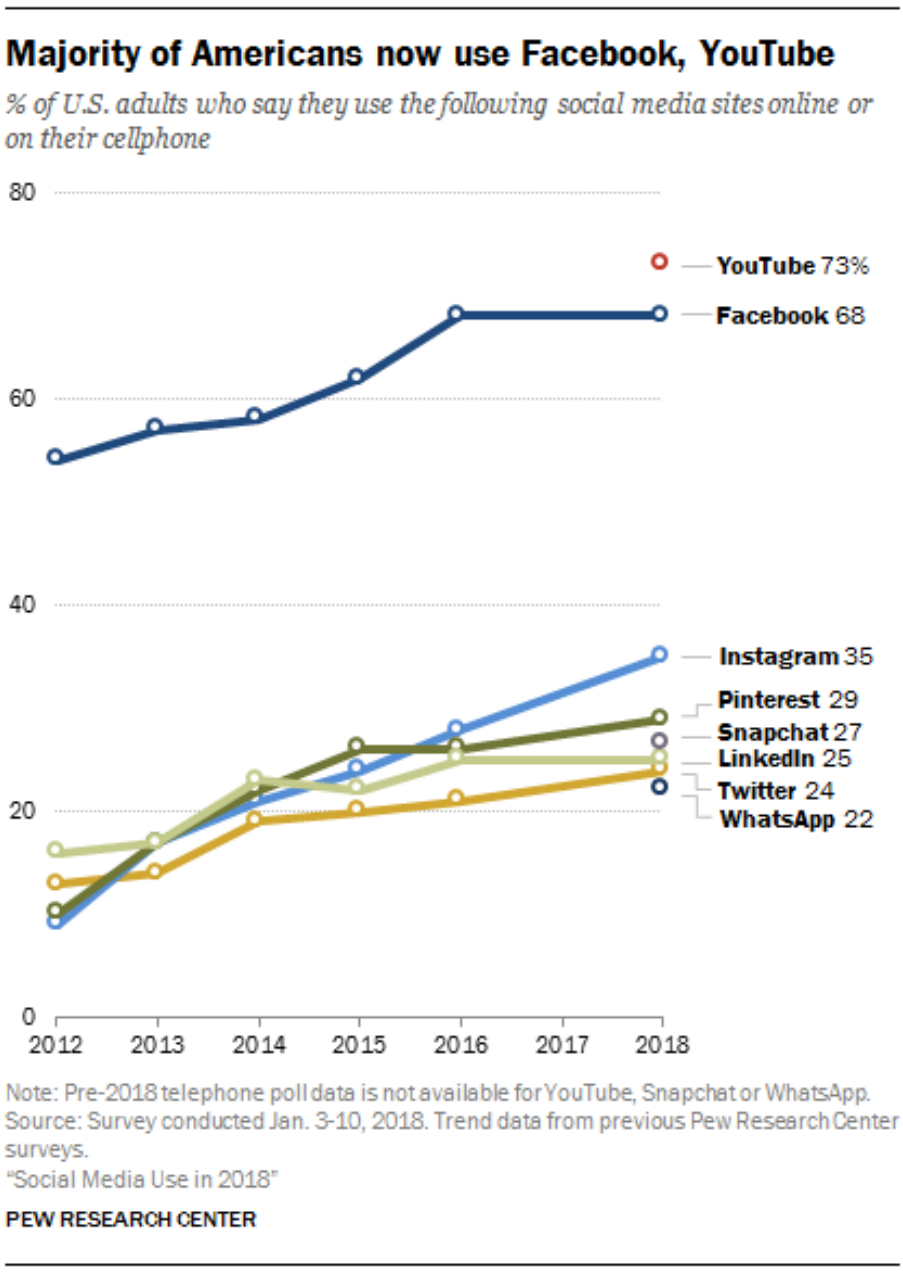

Figure 3: Pew Research findings on the percent Americans using specific social media sites. Source: Pew Research Center, 2018.

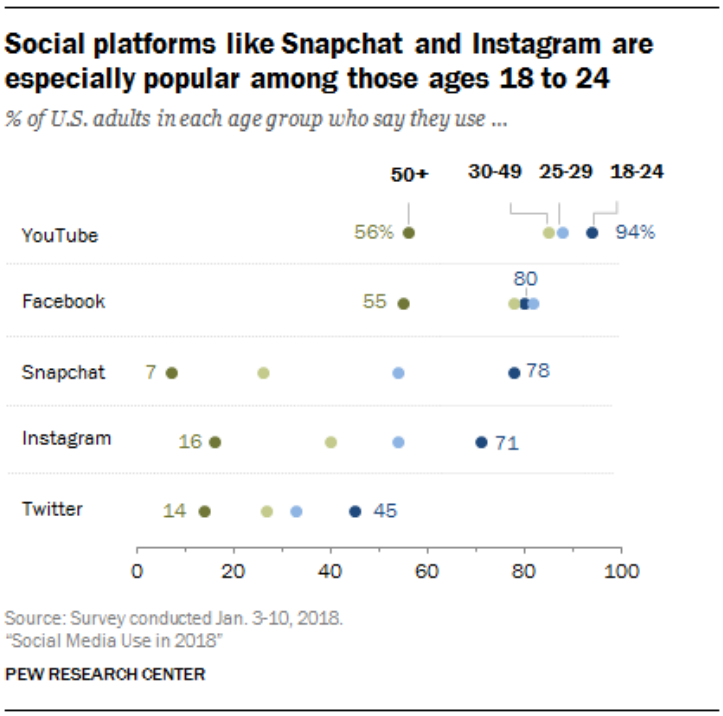

Figure 4: Pew Research findings on age demographic specifics of various social media platforms. Source: *Pew Research Center*, 2018.

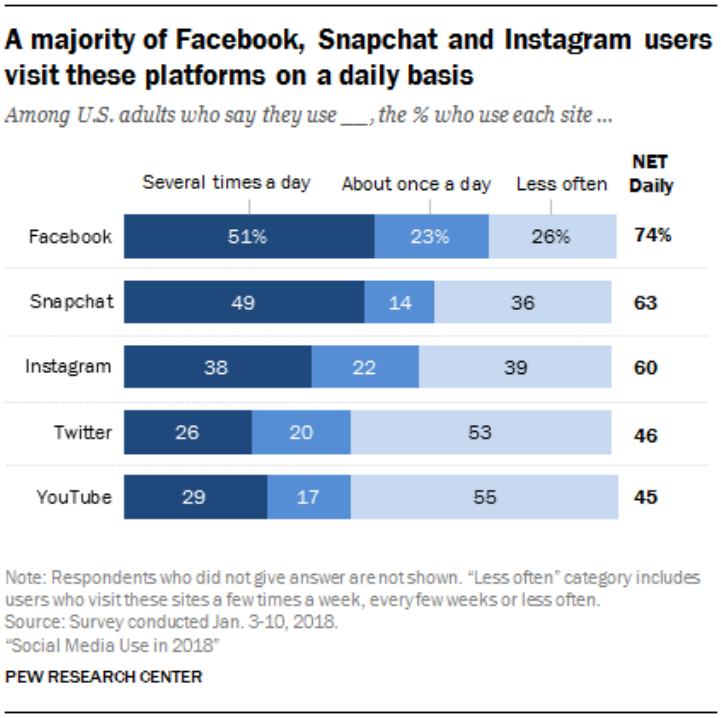

Figure 5*:* Pew Research findings on percent daily use of social media platforms. Source*: Pew Research Center*, 2018.

Meeting Needs

Key to both the Seaport district and the Warm Spring District are the amenities it provides and the momentum they attract. Boston focused on three developments: flexible housing options, dining and entertainment, and educational institutions (ibid). Recognizing the potential for gentrification in a tech and entrepreneurship centered environment, Boston designated 15% of its 12,000 residents as affordable housing, and an additional 15% as micro-units designed to be affordable and convenient to workers in the district; the plethora of dining and entertainment options helped create a unique identity for the district, and Babson College, a top entrepreneurial minded university, built a presence and encouraged innovation activities.

Fremont has decided to tackle a different set of needs: the growth of the technological sector of the Silicon Valley. The new housing developments, elementary school, and neighborhoods connected via BART, the mixed-use public ream prioritizes jobs alongside community development. As per the 66% of millennials who listed high quality transportation as a top factor in deciding where to live (Rockefeller Foundation and Transportation for America), the Warm Springs District centers growth around BART and its anchor, the Tesla factory. Even more valuable, however, are the half-acre "Innovation Cultivator" set aside for early-stage startups and companies and the 22-acre Technology Center that will include office, research and development, and 110,000 sq.ft for advanced manufacturing ("Warm Springs: A fresh outlook on yesterday's innovation district"). Indeed, Fremont's innovation district attracts some of the most innovative companies in the Bay Area and other high-profile businesses. Seeing this, developers invested $50 million to the creation of amenities, including a state-of-the-art elementary school. Housing serves to supplement economic development by further drawing new residents. Shea Homes, one of the central housing companies for Fremont, has a tagline that emphasizes the school, in addition to a loop trail, half basketball courts, and other infrastructures in place for families. Homes and amenities, in conjunction with proximity to job sectors and transportation, call attention to residents' desire for placemaking and stability.

Suggestions

- **Participate** in community-led grass roots initiatives, such as school or library-focused approaches, to gain support and input, given the insufficiency of public planning meetings and public availability of proposed plans

- **Provide** alternative means of community engagement (online surveys, student-programs) to address and overcome issues and concerns:
    - Low population density and long distances decrease cohesion of communities and increase conflicting viewpoints
- **Implement** a variation of Boston's "community brokers" to creatively and effectively advertise in a community
    - Stakeholder groups with a deep understanding of community concerns are possible candidates, and their investment can limit delays and potential lawsuits
- **Proactively increase** community support by recognizing the need for amenities and placemaking in residential areas
    - **Include** amenities such as parks, restaurants, bars, grocery stores, childcare facilities, and public schools
    - **Strategically** locate these amenities to increase convenience
- **Prioritize** building physical infrastructure to facilitate startup growth
    - **Include** public meeting spaces, affordable offices, technology, and startup accelerators
- **Emphasize** community programming as a means of facilitating creative collisions and increasing community cohesion
- **Address** accessibility concerns regarding different income levels

Social Equity

Issue Identification

As our team learned more of innovation districts, our initial questions centered around equality and equity issues, considering the pull for young tech workers with high-incomes. With higher incomes come higher disposable incomes and a greater willingness to pay for certain amenities. Per the law of supply and demand, prices increase, and with an influx of these high-income earners, middle and low-income earners are effectively "priced-out", either by housing costs or living expenses, and forced into peripheries. Indeed, as represented in **Figure 6**, nearly a third of Bay Area households spent at least 35% of its income on housing in 2017, with households making less than $50,000 annually spending over half of their income on housing alone ("Housing Affordability"). This becomes especially concerning in a city like Milpitas, where the average adult with a high school diploma or less only makes approximately $40,000 per year, and over half of the Milpitas population (55.6%) has an education attainment level of less than a bachelor's degree.

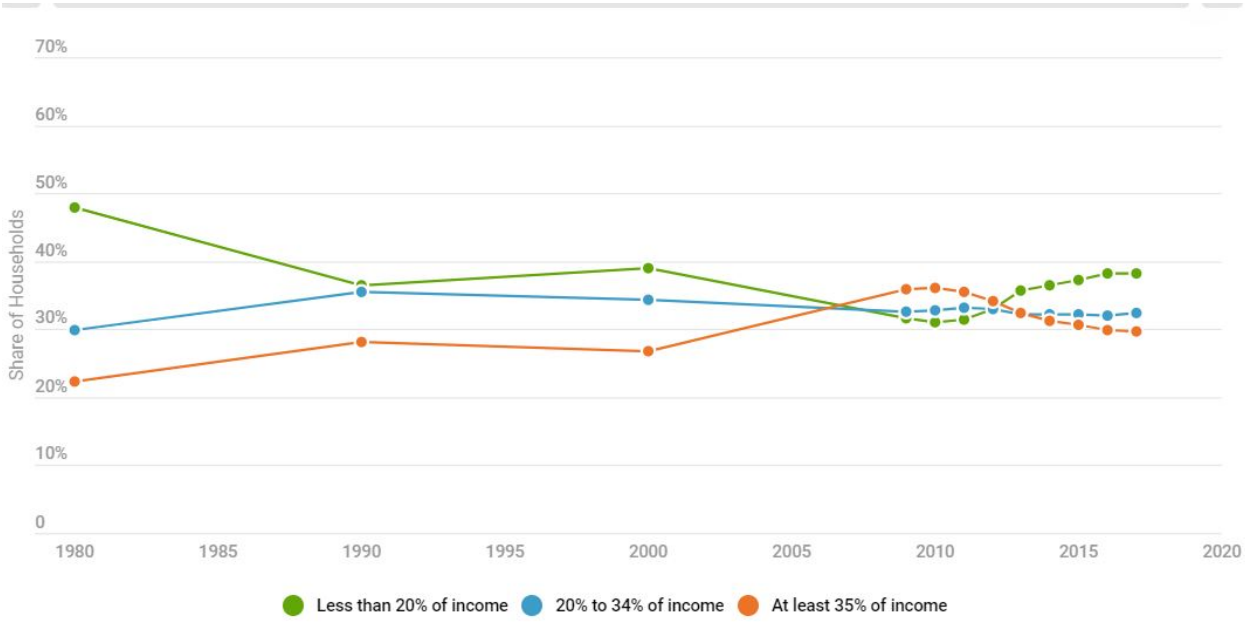

***Figure 6**:* Change over time in percent spent on rent/housing in relation to total number of households. Source: Vital Signs, 2018.

Context

In theory, innovation districts bring job opportunities that would benefit not only those living in the district but those adjacent to it as well—namely, the low- and middle-income communities surrounding these areas. However, with a pattern of poverty clustering, in which the poorest citizens aggregate in the poorest neighborhoods, residents from these communities run the risk of further marginalization and detachment from growth and revitalization. In Philadelphia's University City-Center City innovation district, although the number of jobs rose by 20%, with 57% of these jobs not requiring a college degree, poverty rates in the district and in the zip-codes surrounding the district increased rather than decreased (Vey). Thus, while innovation districts ideally increase economic development and increase revenue that can be reinvested in public amenities like education and infrastructure, its spillover effects are limited.

Housing Issues

In the Bay Area, social equity becomes even more prominent considering the housing crisis. The technology boom around the Peninsula has threatened affordable and adequate housing for peoples of all income levels and brought into question the displacement of long-time residents. The Fremont innovation district has quickly responded to this by planning for 4,000 dwelling units to be built in Warm Springs. Initial development with Lennar would designate 286 of its 2,214 units (12.9%) as affordable housing units—193 low-income units, and 93 very low-income units (Ramos). Residents insisting on Social Equity for Fremont, or RISE Fremont, have insisted on increasing this number, with the understanding that Lennar has previously planned for 35% affordable housing in a San Francisco development.

While the housing crisis is not as dire in Milpitas as in other Bay Area cities, it will nonetheless be affected in coming years, and the city must act proactively to limit its effect. Where Fremont has focused on manufacturing, which provides jobs for middle/lower class workers, Milpitas may have a larger social gap, since their entrepreneurially focused and software driven innovation district will not have as many opportunities for blue collar workers. We therefore suggest that a holistic approach to innovation districts must include community engagement alongside placemaking, transit, and infrastructural advancements to align community need with planning.

Other Considerations

Alongside these socioeconomic concerns are those of racial equity. The Boston Seaport district houses fewer than 3% African American residents, while the same ethnic group comprises nearly a quarter of the city's population. In stark contrast, the Seaport district is 89% white with a median household income of approximately $133,000 (Ryan et al). Such a drastic racial disparity can in part be attributed to the high cost of living or staying in Seaport: parking can cost $30 for three hours, and developers can satisfy affordable housing requirements by paying housing and apartment developments in nearby neighborhoods in lieu of investing in affordable housing in the innovation district itself(ibid). Though the government can provide some amelioration, interest in commercial development has triumphed at the expense of diversity and inclusivity.

Suggestions

- **Limit** the extent of gentrification by building on raw land with few initial residents, as in the case with the Warm Springs district
    - **Provide** a surplus of housing by taking advantage of the extensive amount of empty single-family homes
    - **Consider** micro-housing as a feasible alternative to house individuals who may otherwise not be able to afford to stay in the area
- **Monitor and regulate** market forces that increase living expenses and rent as the development of venture capital and tech opportunities attract higher-income earners
- **Acknowledge** the diversity of languages and cultures in Milpitas
    - **Support** local, especially minority-owned, businesses
- **Encourage** the development and expansion of the service industry, for example:
    - Zoning for retail, restaurants, and other service entities
    - Reducing rent for service industry
    - Policies that enable cooperation between tech companies and service industries
- **Negotiate** with stakeholders to invest in equitable education

Funding

Adequate funding ensures the longevity as well as the initial success of an innovation district. Boston and Fremont followed two models: the former relied primarily on corporate third-party funding, while the latter relied primarily on government funds. The Milpitas innovation district, because of its emphasis on start-ups and tech entrepreneurs, should combine these two methods, with a focus on privatizing the area to create a more attractive environment. To do so, however, Milpitas must first convince companies to move to their area.

Uncertainties

As Milpitas starts to create its innovation district, it must first acknowledge its position as a suburb rather than a large city; in becoming an innovation district, it already lacks the business identity and pull that major cities such as San Francisco and San Jose possess. Instead, Milpitas can draw attention to the opportunity businesses have as technological companies spill over from the Peninsula to its surrounding areas—that is, although it is not a booming metropolitan now, we can speculate that technology and tech jobs will spill over in the coming years. The innovation district plans for and accommodates this.

Suggestions

- **Incorporate** government and corporate financing as an alternative to solely driving economic growth through government funds
    - **Involve** corporates to efficiently use funding and resources, and to ensure that the general attractiveness of the area to local and large businesses
- **Think** creatively when city planning and consider innovative ways to maximize housing and encourage entrepreneurial events

Conclusion

Innovation districts provide the foundation for advancements and new inventions by facilitating creative interactions between companies, entrepreneurs, researchers, and investors across a variety of sectors and disciplines. Labeling the Milpitas area as an "innovation district" does not make it innovative. Creating a young, urban environment requires significant time to ideate, plan, and implement, especially given the compact size of Milpitas and its suburban, rather than urban, design. Moreover, equally important to economic development is community engagement and a common sense of identity. The Fremont Warm Springs district has done this most notably through its "weirdification" efforts. Should the Milpitas innovation district follow a similar approach, it must find acknowledge and address social equity issues—housing, representation, socioeconomic diversity—while incorporating economic vitality that start-ups and businesses seek. As the Fremont district demonstrated, close collaboration with the private sector encourages development and fosters placemaking by establishing a social networking infrastructure.

Moving forward, the City of Milpitas must consider how to attract large and small businesses to establish high quality jobs for its residents, all the while empowering the existing population to take residence and jobs within the city. The land must be used effectively and efficiently, with upwards construction, and most critical to an innovation district, it must respond to the needs and desires of the community to create cohesion and a common identity.

Appendix

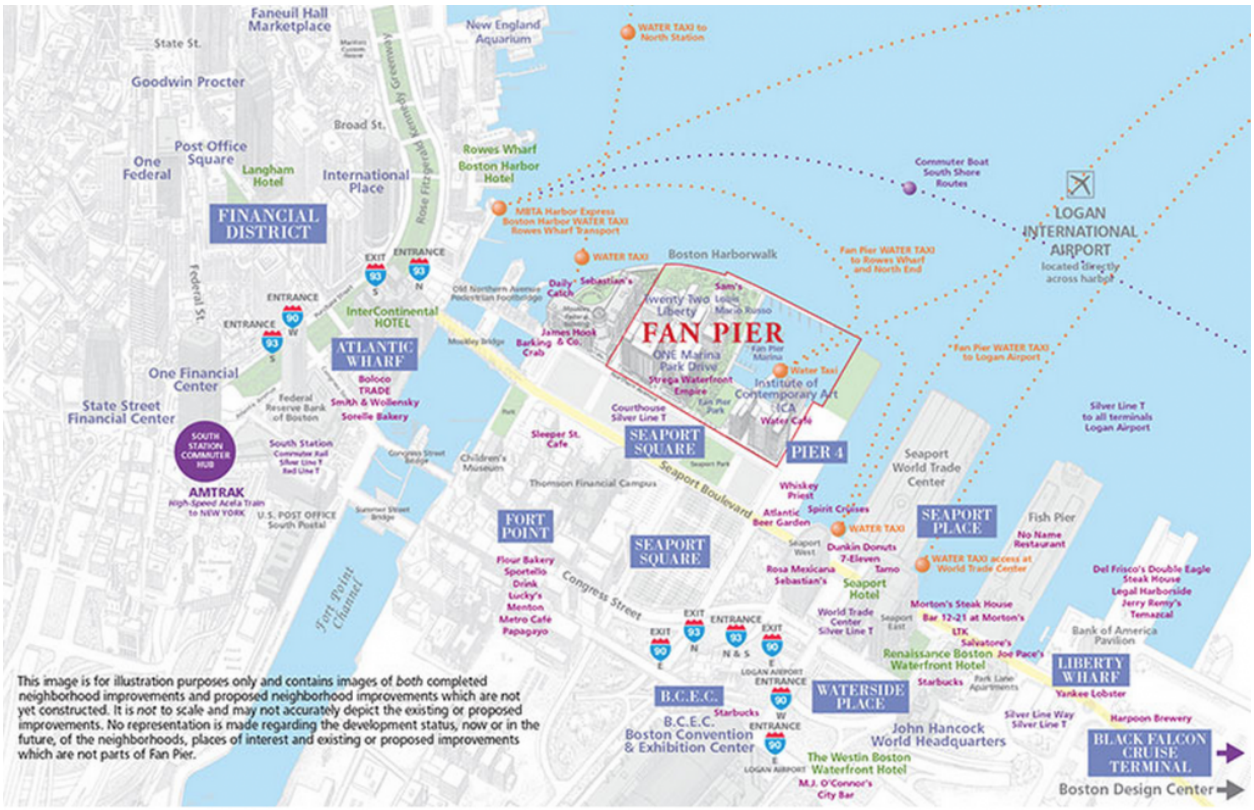

Figure 1. Map of retailers, areas, and notable sites in the Boston Innovation District. Source: Etter, Karoline, Big Fish Communication, n.d.

Boston	**Fremont**
Zoning and Economic Development	
Anchored its space at its waterfront with progressive and changing atmosphere	Anchored its district in the Tesla factory on Boston's south border
Seaport combines commercial retailers, with restaurants, with residences in mixed-use locations. Public space for recreation and testing-new technologies is also provided	Fremont shifted focus almost purely to residential units to address the housing crisis, and thus lacks the benefits of place-making
Seaport might be socially unsustainable as its lack of public transport and its rising housing price push low and even middle-income workers out of the district	Fremont allotted the majority of its land to housing development, leaving little for economic expansion and innovation. Upper-middle income workers might move to more centralized location to their offices
Community Engagement	

Used social media ads and "community brokers" to interact with the citizens	Struggled to "weirdify" the district as a result of the mismatch between its target resident demographics and its actual resident demographics
Focused on flexible housing options, dining and entertainment, and educational institutions	Focused on tackling the need of the growth of the technological sector of the Silicon Valley
Social Equity	
Seaport's high cost of living leads to its drastic racial disparity with fewer than 3% African American residents	Built 4,000 dwelling units in response to the housing crisis
Funding	
Relied primarily on corporate third-party funding	Relied primarily on government funds

Table 1. Comparison of the Boston and Fremont Innovation District, by group. Source: Yvonne Hong, 2019.

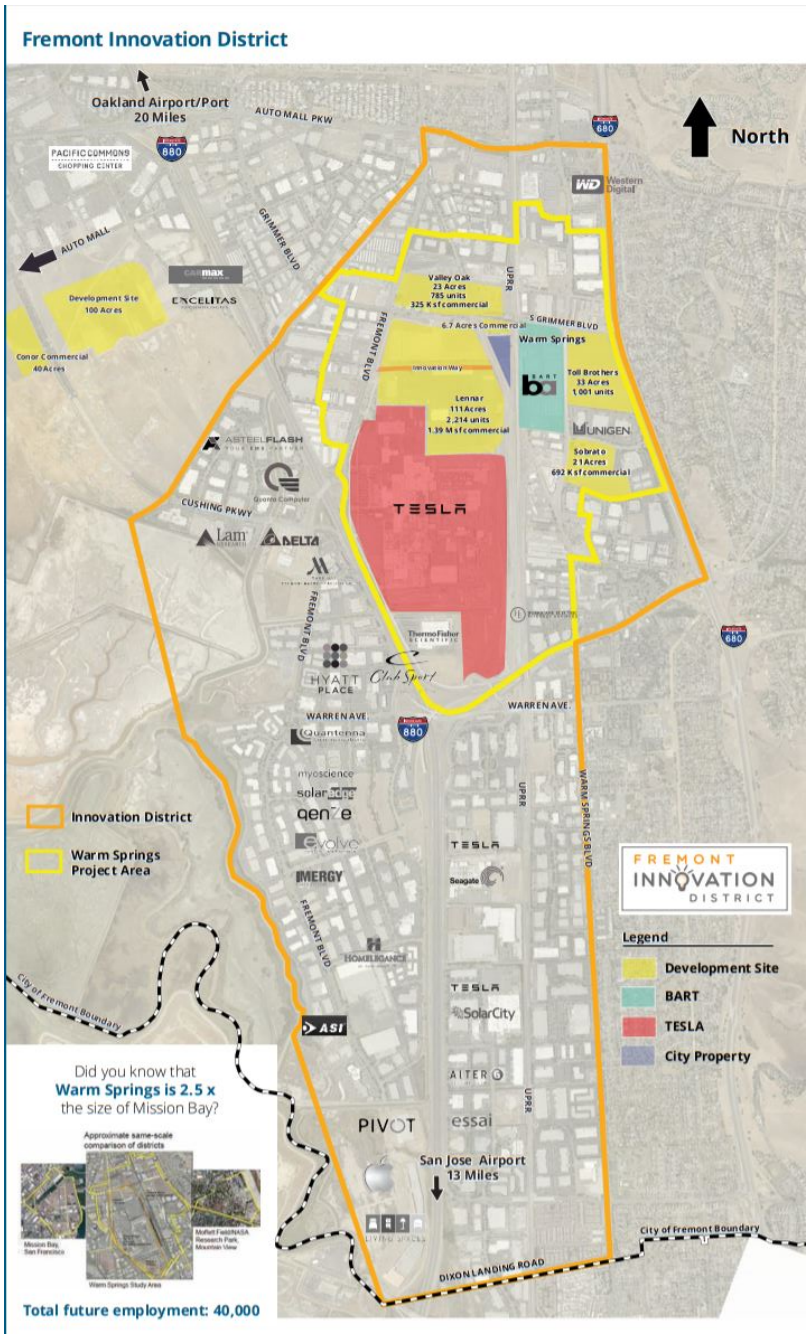

Figure 2. Map of current Fremont Innovation District. Source: City of Fremont, 2014.

Figure 3. Poster and banner in the residential area of the Fremont Innovation District. One reads "The PERFECT HOME for your startup", behind the welcome center poster. Source: Jessica de la Paz, 2019.

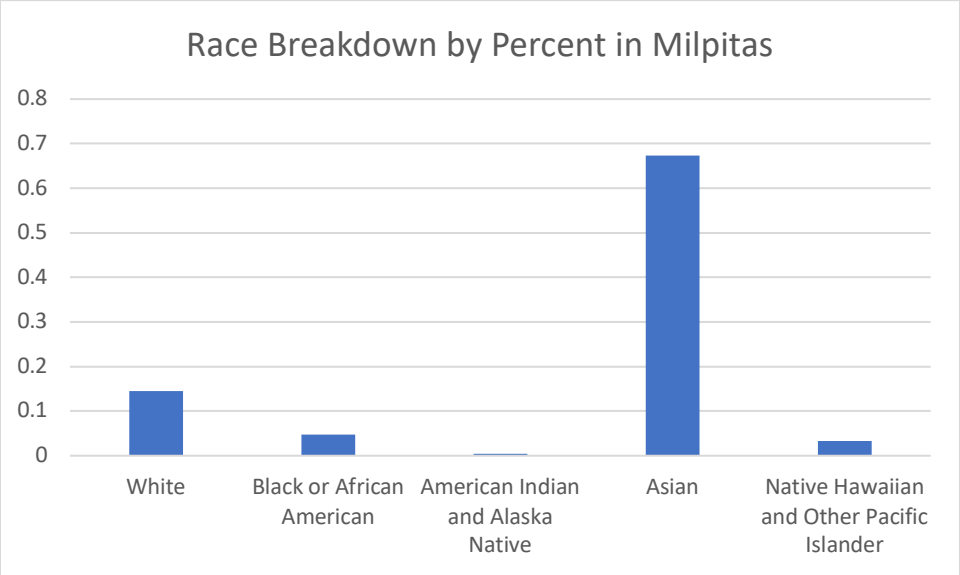

Figure 4. Race breakdown for residents in Milpitas identifying with one race only. Source: FactFinder, 2019. Graphic by Jessica de la Paz, 2019.

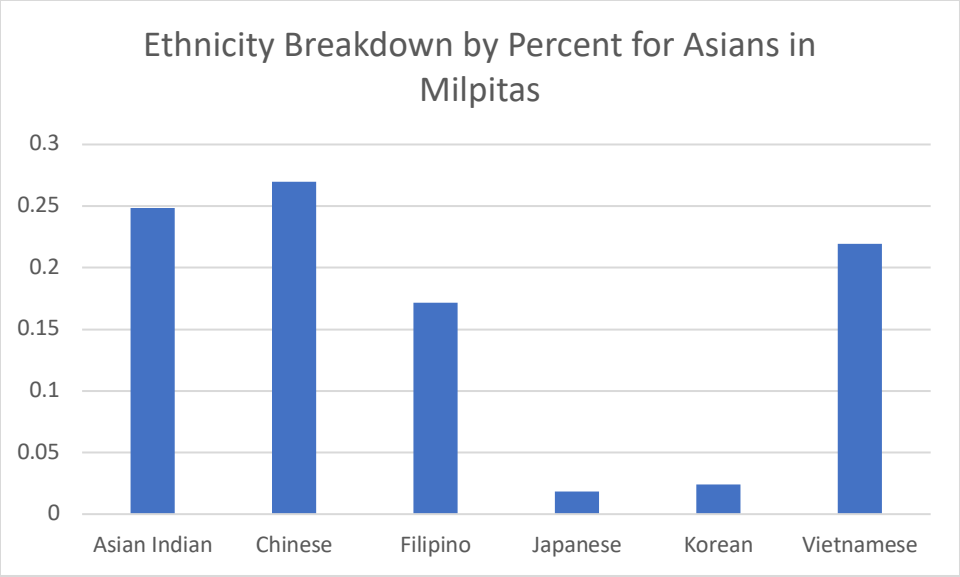

Figure 5. Percent composition for residents identifying as Asian only. Source: FactFinder, 2019. Graphic by Jessica de la Paz, 2019.

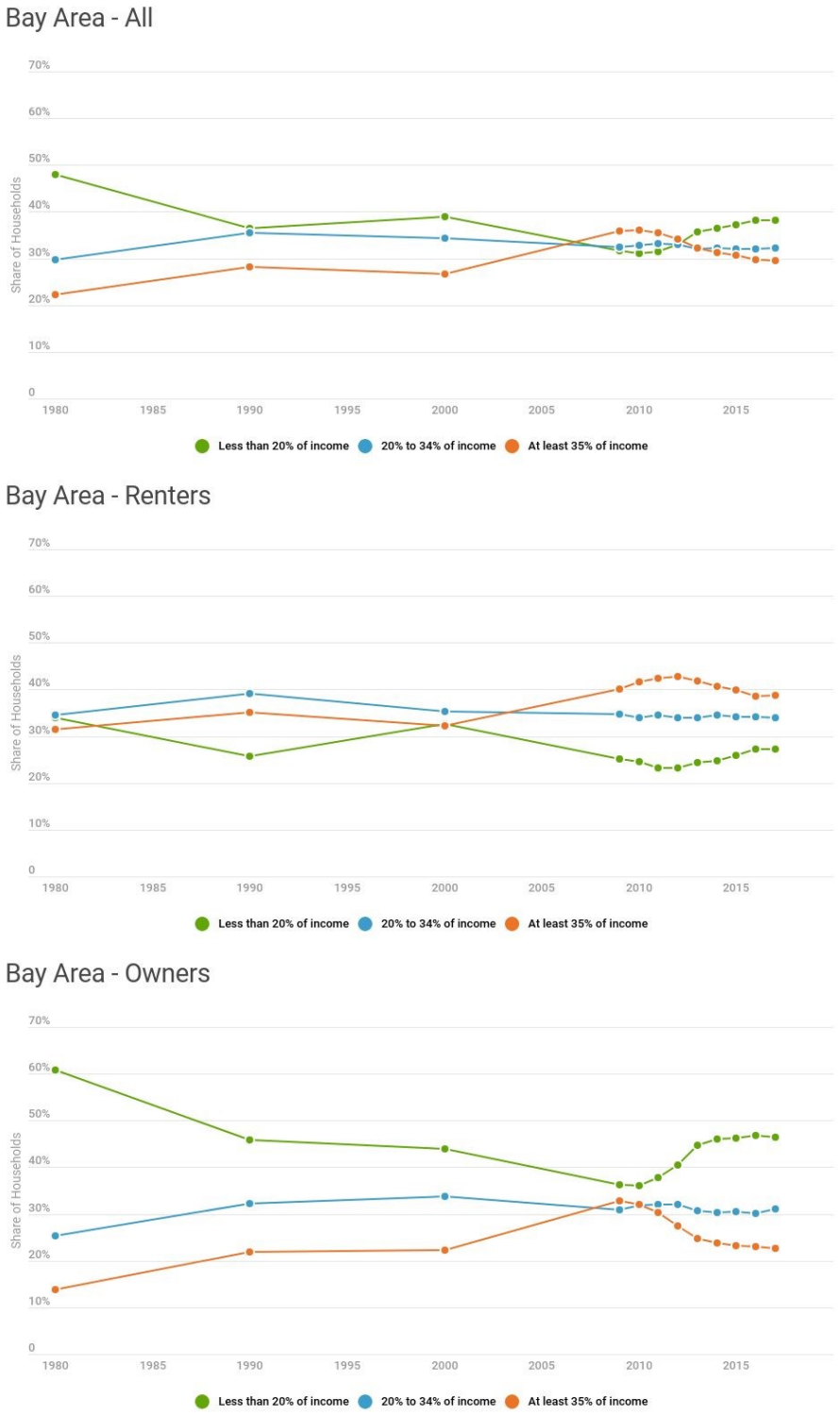

Figure 6. Change in number of residents in the Bay Area renting or owning a house. Source: Vital Signs, 2018.

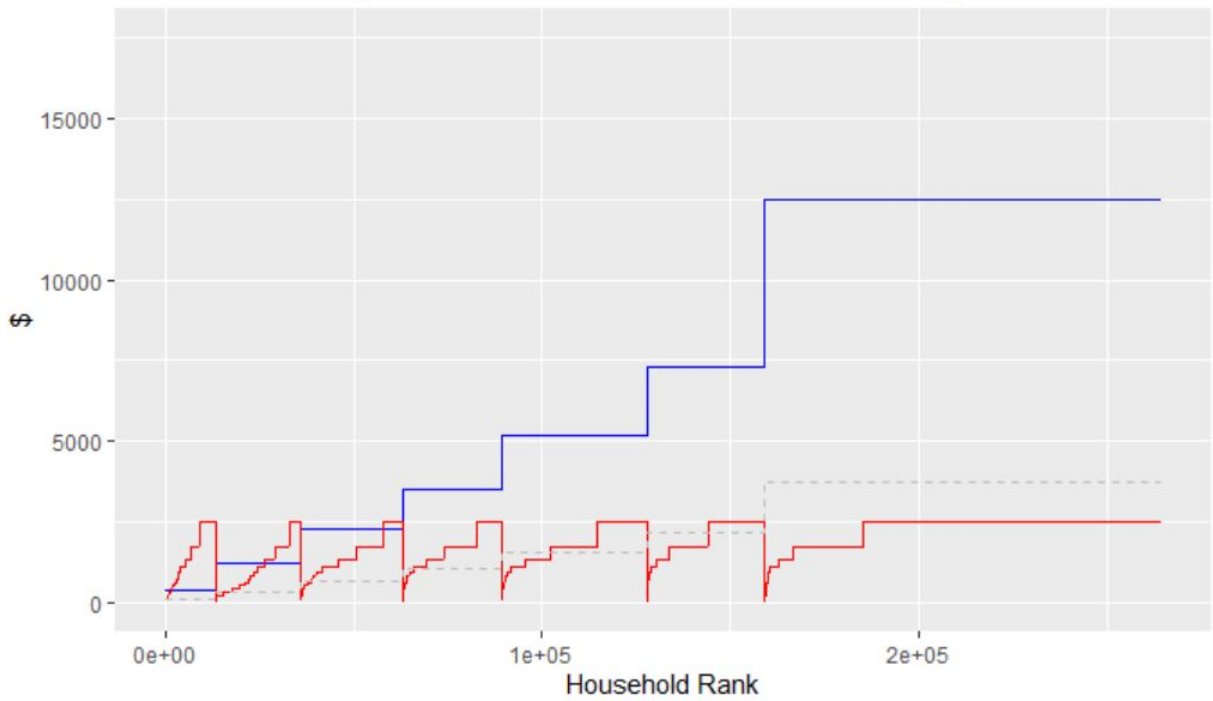

Figure 7. Predicted monthly income and rent for Santa Clara County renter households (simplified model). Source: Jessica de la Paz and Derek Ouyang, 2019.

Works Cited

"A B2B Tech Community for Cross-Border Startups." *FalconX*, https://www.falconx.us/. Accessed 10 Dec 2019.

"Asthma & Air Pollution." *California Air Resources Board*, n.d. Retrieved from https://ww2.arb.ca.gov/resources/asthma-and-air-pollution. Accessed 4 Dec 2019.

Baily, Martin Neil and Nicholas Montalbano. "Clusters and Innovation Districts: Lessons from the United States Experience." *The Brooking Institution*, May 2018.

"Bay Area leads nation in commuters traveling at least 3 hours every day, study says." *ABC7*, 15 March 2019. Retrieved from https://abc7news.com/traffic/bay-area-leads-nation-in-commuters-traveling-3-hours-study-says/5195381/. Accessed 3 Dec 2019.

Berger, Noah. "The Bay Area in 2040." *MTC*, n.d. Retrieved from https://mtc.ca.gov/sites/default/files/2-The_Bay_Area_In_2040.pdf. Accessed 3 Dec 2019.

"City of Boston." American Fact Finder. *United States Census Bureau*, 2017. Retrieved from https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml. Accessed 2 Dec 2019.

"City of Fremont." American Fact Finder. *United States Census Bureau*, 2017. Retrieved from https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml. Accessed 2 Dec 2019.

"City of Milpitas." American Fact Finder. *United States Census Bureau*, 2017. Retrieved from https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml. Accessed 2 Dec 2019.

Data Access and Dissemination Systems (DADS). "American FactFinder - Results." *American FactFinder - Results*, 5 Oct. 2010, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF. Accessed 20 Nov 2019.

"DEVELOPMENT PROJECTS." City of Milpitas Economic Development, 22 May 2018, http://www2.ci.milpitas.ca.gov/economicdev/home/developmentprojects/. Accessed 10 Dec 2019.

Hoban, Michael. "The Creation of a Neighborhood: Boston's Seaport." *Urbanland*, 10 Sept 2019. Retrieved from https://urbanland.uli.org/development-business/the-creation-of-a-neighborhood-bostons-seaport/. Accessed 26 Nov 2019.

"Housing Affordability." *Vital Signs*, Retrieved from http://www.vitalsigns.mtc.ca.gov/housing-affordability. Accessed 29 Nov 2019.

Ng, Jonathan. "Developing problems: Boston Seaport construction not all positive." *Boston Herald,* 20 Dec 2018. Retrieved from https://www.bostonherald.com/2018/12/20/developing-problems-boston-seaport-construction-not-all-positive/. Accessed 26 Nov 2019.

Porter, Michael E. "Clusters and the New Economics of Competition." *Harvard Business Review*, 1998. Retrieved from https://hbr.org/1998/11/clusters-and-the-new-economics-of-competition. Accessed 25 Nov 2019.

Ramos, Julian. "Fremont group seeks more affordable housing in Warm Springs project." *Mercury News*, 5 Feb 2015. Retrieved from https://www.mercurynews.com/2015/02/05/fremont-group-seeks-more-affordable-housing-in-warm-springs-project/. Accessed 30 Nov 2019.

Rosenthal, Stuart S. "Geography, Industrial Organization, and Agglomeration." *Maxwell School of Citizenship and Public Affairs*, 2003.

Ryan, Andrew, et al. "A Brand New Boston, Even Whiter than the Old." *Boston Globe*, 11 Dec 2017. Retrieved from https://apps.bostonglobe.com/spotlight/boston-racism-image-reality/series/seaport/. Accessed 29 Nov 2019.

"Silicon Valley's Incubator and Startup Launchpad." Startpad, http://startpad.co/. Accessed 10 Dec 2019.

Smith, Aaron and Monica Anderson. "Social Media Use in 2018." *Pew Research Center*, 1 March 2018. Retrieved from https://www.pewresearch.org/internet/2018/03/01/social-media-use-in-2018/. Accessed 27 Nov 2019.

"The Development of Boston's Innovation District: A case study of cross-sector collaboration and public entrepreneurship." *The Intersector Project*. Retrieved from http://intersector.com/wp-content/uploads/2015/10/The-Development-of-Bostons-Innovation-District.pdf. Accessed 27 Nov 2019.

"Top 20 Patent Generating Cities, California (Table)." Silicon Valley Indicators, https://siliconvalleyindicators.org/data/economy/innovation-entrepreneurship/patent-registrations/top-20-patent-generating-cities-california-table/. Accessed 10 Dec 2019.

"Warm Springs: A fresh outlook on yesterday's innovation district." Think Fremont. *Think Silicon Valley*, n.d. Retrieved from https://www.thinksiliconvalley.com/innovation-2/. Accessed 27 Nov 2019.

Vey, Jennifer. "Does Innovation Equal Gentrification?" *Metropolitan Revolution*, 11 July 2017. Retrieved from https://www.brookings.edu/blog/metropolitan-revolution/2017/07/11/does-innovation-equal-gentrification/. Accessed 30 Nov 2019.