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cover: Jeff Olshan p6: Santa Clara VTA p9: Kyle Wilson p10: SamTrans

p11, 14: Jeremy Nelson p13: MidPen Housing p16: Greenbelt Alliance The Non-Profit Housing Association of Northern California (NPH) and Urban Habitat collaborated on this report to bring a more thorough perspective to the growth challenges facing Silicon Valley. As the region embarks on a comprehensive sustainable development plan, we hope these insights will help shape a future that is prosperous for all.

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# **EXECUTIVE SUMMARY**

Silicon Valley is anticipated to rebound from the recession with new jobs driving recovery. However, for the first time, the high-paying technology sector will not be the trendsetter. In fact, over 67 percent of Silicon Valley's projected job growth and its largest workforce, will be in sectors paying less than \$50,000 annually. Yet, regional plans for housing and transportation do not meet the needs of this workforce, which results in farreaching consequences.

The challenge starts with the existing lack of affordable housing near job centers with lower paying jobs. Even when workers find a home near their jobs, the lack of appropriate transit forces them into cars, further straining tight household budgets and overloading already congested roads. This results in Silicon Valley traffic remaining among the worst in the Bay Area and contributing to air pollution.

Moving Silicon Valley Forward explores these issues by focusing on the challenges faced by the commuting workforce in two key counties: San Mateo County and Santa Clara County. What happens within these two counties has implications for the whole San Francisco Bay Area. The first is seen on the region's roadways. Out of the two counties' 37 incorporated and unincorporated communities, five alone account for nearly 98,000 cars on the road driven by commuters who live outside the county in which they work, called in-commuters.

The in-commuters look different than what one would expect. They are retail clerks, restaurant workers, office assistants, janitors, health care aides, security guards and many other service workers. They are equally essential to the region's vitality yet local planning does not reflect their most important needs: 1) housing that matches

their incomes, and 2) transit options for their commutes. For instance, over 45 percent of workers who commute to San Mateo County from outside the county earn less than \$40,000. In Santa Clara County, 30 percent of its in-commuters earn that salary. Workers in that income bracket can afford monthly rent of \$1,200, yet at that level there is a lack of over 53,000 homes.

Furthermore, there is evidence of systemic inequity that has a disproportionate impact on lower income families and communities of color. Across these communities, workers are forced to choose between living in substandard conditions, paying too much for housing, or commuting long distances to find affordable places to live—in some cases, spending upwards of 70 percent of their paychecks on housing and transportation. The services they depend on the most are the least well-funded and least accessible.

These challenges are not insurmountable. *Moving Silicon Valley Forward* makes recommendations for crucial next steps. The specific suggestions prioritize investments that match housing and transit needed by all workers. The steps will require a coordinated effort across cities and towns, and agencies. The authors of this report recognize the complexities of that cooperation but suggest that if Silicon Valley is to have a more sustainable future that is also equitable and reflects the entire community, then it will be worth the effort.

# SILICON VALLEY'S DILEMMA: JOBS BRING TRAFFIC CONGESTION

If there is any doubt about what will happen when Silicon Valley fully rebounds from the recession and brings more workers into the region, one need only look to the congested roads.

Despite the economic downturn in 2010, the typical Silicon Valley auto commuter still lost a total of 37 hours sitting in traffic that year. Commuters had less time to spend with their children, getting to their next job, providing care to elders, giving back to their community or simply resting. This takes a toll on health and well-being, and ultimately on quality of life. This is especially true at the regional level where car commutes have contributed significantly to air pollution. In 2010, 36 percent of all greenhouse gas emissions in the Bay Area were from transportation, and 76 percent of that from cars and light trucks.<sup>2</sup>

Furthermore, 65 percent of all Silicon Valley workers in those income ranges drive alone to work, far outpacing the rest of California in this category. San Jose tops the list of low-income workers commuting in single occupancy vehicles.<sup>4</sup>

#### WHO IS BEING DRIVEN AWAY?

A closer look at who the commuters are provides a valuable clue. Contrary to popular perception, the average commuter into Silicon Valley is not the highly paid technology worker. More than 45 percent of incommuters into San Mateo County earn less than \$40,000 per year, and nearly 20 percent earn less than \$15,000 per year. The incommuters who drive to Santa Clara County from other counties for work have a slightly higher income profile, with over one-third earning less than \$40,000, and 18 percent earning less than \$15,000 per year.<sup>3</sup>

## Portrait of Silicon Valley Workforce

Half of Silicon Valley in-commuters may be someone you know:



Mom works as a child-care provider in Santa Clara, and Dad is a janitor in Palo Alto, together providing for their family of four with just \$64,200, driving in from Daly City.



Dad is an elementary school teacher in Menlo Park, and Mom is a bank teller in Sunnyvale, both driving to work from San Leandro to earn \$94,000 per year to save for their two kids who want to go to college.



Mom drives one hour each way from East Palo Alto to her retail job in San Jose, earning only \$27,400 on which to raise her toddler.

# THE CAUSE: JOBS-HOUSING MISMATCH

THE INCOME PROFILE OF IN-COMMUTERS LINKS WITH THE FACT THAT SILICON VALLEY'S HOUSING PRODUCTION HAS NOT KEPT PACE WITH THE INCREASING WORKFORCE DEMANDS, DRIVING PRICES UP AND WORKERS OUT.

In the Bay Area, the ratio of jobs to housing is 1-to-1. By contrast, Silicon Valley's ratio is 3-to-1. For example, the city of Santa Clara has two jobs for every home, and Palo Alto has three jobs for every home. Plus, the current supply does not match what most workers can afford, forcing some into those long commutes.

# Foreclosure Crisis Has Not Produced a Solution

Some may suggest the foreclosure crisis should solve the affordable housing problem. While there are more affordably priced for-sale homes on the market in some Santa Clara and San Mateo communities, there is a far greater shortage of affordable rental homes. *Table 1* shows that households earning \$69,000 annually can afford to buy a condominium, but single-family homes are out of reach. But, for the fast-growing workforce, which earns less than \$50,000, homeownership is not an option since they earn well below what is needed.

### Affordability Gap Analysis

For single-family home and condominium. 2011

(table 1)

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	Median Home Sale Price	Annual Income Needed to Afford Median Price (with 10% down)	Percent of AMI
SAN MATEO COUNTY			
Single Family Residence	\$696,700	\$134,600	147%
Condominium	\$358,400	\$69,300	76%
SANTA CLARA COUNTY			
Single Family Residence	\$629,800	\$121,700	131%
Condominium	\$356,500	\$68,900	74%
Area Median Income (AMI)			

Area Median Income (AMI) SANTA CLARA COUNTY: \$91,450 SAN MATEO COUNTY: \$93,250

Sources: Zillow, HUD.

Since the foreclosures are not alleviating the housing affordability crisis, an examination of the rental market provides insight. *Figure 1* shows that most workers are left out in the cold when it comes to renting a home in Silicon Valley. From waiters to bank tellers to teachers, none earn the \$69,000 to 82,000 needed to rent a typical two-bedroom home in either county.

Figure 2 details the mismatch between rental housing supply and demand for different income levels. For instance, households with an annual income of \$43,000, can afford a monthly rent of \$1,200. In that monthly rent category, there is a shortfall of 22,000 homes in San Mateo, and 31,000 in Santa Clara County. Clearly, for households in the lowest income ranges, the housing crisis is not a crisis of homeownership but of renting.

### Typical Annual Salaries vs. Annual Salary Need

To afford the average 2-bedroom apartment in Santa Clara and San Mateo Counties.

(figure 1)



Sources: California Employment Development Department (EDD), 2010 American Community Survey (ACS), HUD.

## Rental Housing Supply vs. Demand

For Santa Clara and San Mateo Counties.

(figure 2)



Source: 2010 American Community Survey (ACS), Quarterly Census of Employment and Wages.

## **MEASURING IMPACT**

WHILE THE SHORTFALL IN HOUSING IMPACTS MANY, THE GREATEST BURDEN IS PARTICULARLY ACUTE FOR TWO POPULATION SEGMENTS: COMMUNITIES OF COLOR AND LOW-INCOME HOUSEHOLDS.

In Silicon Valley, renters of color are more likely to be rent burdened as compared to all households in San Mateo and Santa Clara counties. Figure 3 shows that 28 to 35 percent of African American and Latino renter households in each county are severely rent burdened, spending more than half of their paychecks on rent.

This disproportionate burden carries over into the homeowner population. As shown in *Figure 4*, approximately one-third of Latino homeowners and nearly a quarter of African American homeowners in both counties pay over 50 percent of their income for homeownership, compared with an average of 17 percent by their Caucasian neighbors.

# STRAINED HOUSEHOLD BUDGETS FORCE LONGER COMMUTES

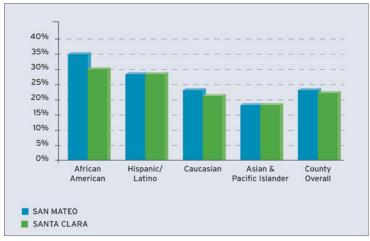
To relieve pressure on their budgets, Silicon Valley workers are forced into bad choices: living near work in inexpensive but overcrowded, unsafe or illegal homes, or moving far away from where they work to find an affordable place to live.

Compounding the problem, studies show that the longer the commute distance, the more likely it is that those who can afford a car will drive. Just five cities alone—Palo

### Severe Rental Burden by Ethnicity

Percent of renter households spending 50 percent or more of their income on rent, 2009.

(figure 3)

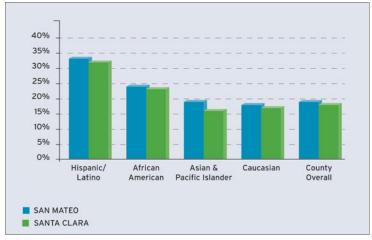


Sources: 2007-2009 three-year estimates, Integrated Public Use Microdata Series (IPUMS), HUD.

## Severe Homeownership Cost Burden

Percent of households spending 50 percent or more of income on homeownership costs, 2009.

(figure 4)



Sources: 2007-2009 three-year estimates, Integrated Public Use Microdata Series (IPUMS), HUD.

Alto, Redwood City, Menlo Park, Santa Clara and Sunnyvale—that are rich in jobs but high in housing costs account for nearly 98,000 in-commuters. But more telling, nearly 80 percent of them drive alone, responsible for 78,000 cars in traffic. Palo Alto forces the most cars onto roads and highways, with 59 percent, or 23,000, of its in-commuters driving alone from other parts of the region to work each day.

While they may be saving on housing costs, the cost of commuting adds to the budget burden faced by many workers. In Santa Clara County, low-income families spend a third of their paychecks on transportation costs, which is more than twice the average across all households in the county, almost 7 percent more than Bay Area counterparts, and over 11 percent more than their neighbors in San Mateo County (*Figure 5*).

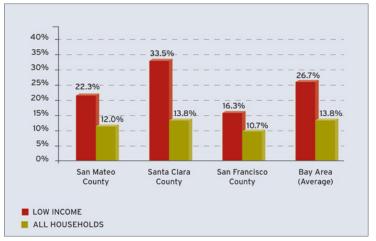
## A More Complete Measure: Housing + Transportation Costs

The link between housing and transportation makes it important to measure both costs when looking at the affordability of a region for workers. This formula more accurately reveals how Silicon Valley's lower income households, drivers of the regional economy, are in economic distress.

According to a national study comparing major metropolitan areas, Bay Area residents spend the most on housing and transportation. The highest burden is on working households with incomes between \$20,000 and \$50,000. These households live in places that tend to be either urban areas segregated

### Transportation Costs as Percentage of Income

2007 Dollars (figure 5)



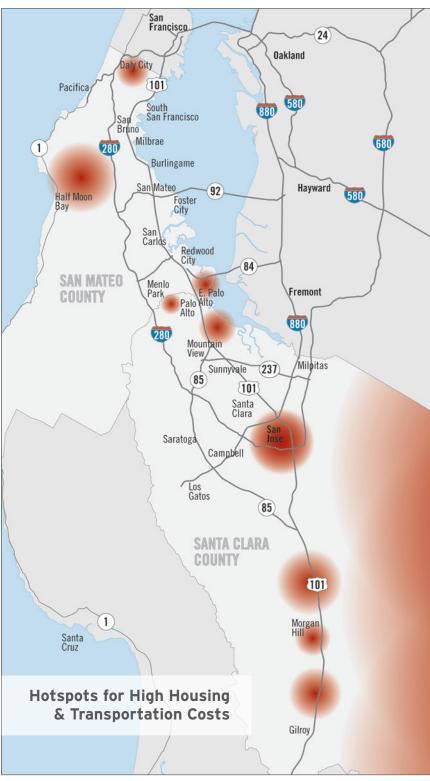
Source: Metropolitan Transportation Commission (MTC).



by race and income, inner suburbs with fewer jobs, outer suburbs far away from jobs and services, satellite cities, or rural areas. In Silicon Valley, these areas start in the northern edge with large swaths of the San Mateo coast and Daly City, moving south along the Highway 101 corridor from Palo Alto to the city of Santa Clara, into some neighborhoods in San Jose, and out to rural communities near Gilroy.<sup>7</sup>

Households in areas like these that earn between \$20,000 and \$35,000 spend 70 percent of their income on housing and transportation costs. Those earning between \$35,000 and \$50,000 spend 52 percent of their income on such costs. By comparison, families earning over \$100,000 annually spend only 24 percent of their income on housing and transportation. Working families have little money left over to cover other essential costs such as medicine, groceries and school supplies.

Once communities have this more complete picture of the affordability crisis, it is clear that remedies must coordinate housing and transportation solutions.



Lower income households in these hotspots spend upwards of 70 percent of their paychecks on housing and transportation.

Source: Center for Housing Policy.

# WHERE TO FOCUS SOLUTIONS

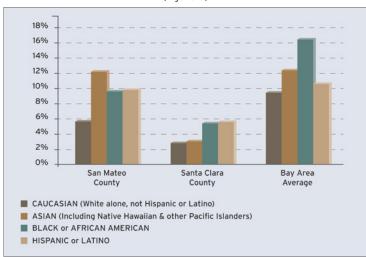
EFFORTS TO REDUCE TRAFFIC AND UNBURDEN FAMILIES' BUDGETS WILL SEE THE MOST RESULTS WHEN THEY TARGET THE SERVICES USED DAILY BY LOWER INCOME HOUSEHOLDS AND COMMUNITIES OF COLOR.

# WHO PUTS FEWER CARS ON THE ROAD?

Low-income households and communities of color are the least likely to use their vehicles, especially given the right options. Nationwide, lower income households own fewer vehicles and drive less than moderate-income households. And, as shown in *Figure 6*, communities of color take transit more often. These trends hold true even in the automobile-oriented Silicon Valley.<sup>9</sup>

### Percent of Households Commuting Via Transit

By race (figure 6)



Source: U.S. Census Bureau, ACS 2006-2008 three-year estimate.

"When going to work, sometimes a family member will take me to work, and sometimes I take Caltrain. When I take the train, I get dropped off at the Palo Alto Caltrain Station either by a family member or a friend, then walk from the 22nd Street Caltrain Station to Hunters Point where I work. It takes about an hour and a half door-to-door."

Alvin Spencer, East Palo Alto

# Are the Most Efficient Systems Funded Adequately?

There are over 25 transit agencies in the nine-county Bay Area. Of those, there are four major transit operators in Silicon Valley. Ridership is an indicator of community need and efficiency, and therefore should inform how transit budgets are allocated. Yet, more money is spent for every train passenger than every bus passenger even though more people use buses.

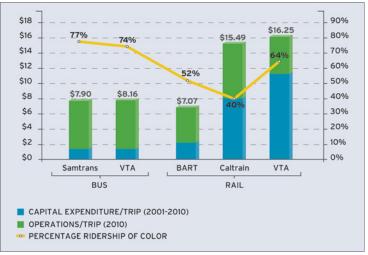
For instance, according to the 2009 Santa Clara Valley Transportation Authority (VTA) Annual Transit Service Plan, the average weekday ridership of just three of the most heavily used buses (Lines 522, 22 and 23) totaled 32,000—almost equal to the entire VTA Light Rail system in 2008, which had just over 33,000 riders. The bus systems are clearly more economical yet are the least subsidized, as indicated by the bars in *Figure 7*.

Most notable was when the subsidy pattern was overlaid with data about who rides those systems. Returning to *Figure 7*, the line graph shows that the VTA bus system has nearly 75 percent of its ridership from communities of color but receives only \$8.16 of public subsidy per passenger. In contrast, Caltrain has only 40 percent riders of color and receives nearly twice the subsidies (\$15.49 per passenger trip).

These disparities are similar when looking at the incomes of riders. *Figure 8* shows that most of the users of bus systems earn less than \$40,000, but buses receive far less subsidy than rail systems, which carry more higher-income earners.

# Capital and Operations Subsidies (per passenger trip FY 2010 \$)

# & Percentage Ridership of Color (figure 7)



Sources: National Transit Database (NTD, FY2001-2010); Statistical Summary of Bay Area Transit Operators (MTC, FY2001-2010), Transit Passenger Surveys: Caltrain, 2010; BART, 2008; SamTrans, 2009; VTA, 2006.



It is also important to point out how this systemic inequity in subsidies has impacted passengers' wallets on a daily basis. According to a 2006 Federal Transit Administration report on Santa Clara VTA, riders of color tended to ride buses and pay cash for daily passes, while Caucasian riders more frequently rode the light rail service and purchased monthly passes, which are more heavily discounted. <sup>12</sup> And when fares increase, monthly passes generally are excluded. Furthermore, shuttle service from commuter rail stations is often free.

So, despite having lower ridership, a disproportionately lower percentage of riders of color, and being less economically efficient, rail systems receive much more public money to operate and even to expand. There is clearly a mismatch between what transit agencies have supported and what communities need.

### Transit Usage by Income

(rail and bus) (figure 8)



Source: U.S. Census Bureau, ACS 2006-2008, three-year estimate.



# Are There Success Models at the Intersection of Housing and Transit?

There are existing models for housing and transit that have proved successful in addressing some societal, environmental and economic challenges for communities. They offer potential remedies for addressing traffic congestion and social inequities.

#### WELL-DESIGNED AFFORDABLE HOUSING

Affordable homes designed with neighborhood needs in mind provide affordable options to live in Silicon Valley, which is a significant community benefit by itself. But a less well-known benefit is how they have also had a positive impact on traffic.

A recent survey of existing privately managed affordable housing developments in San Mateo and Santa Clara counties showed that residents commute by means other

than a vehicle at much higher rates than the average for the Bay Area and Silicon Valley as a whole. Residents were asked to describe how their commute distance to destinations, such as work, school and shopping, changed after they moved into their affordable home. Seventy-two percent indicated that they were generally the same distance or closer to the places where they needed to go.<sup>13</sup> These types of homes can be models for how to reduce traffic, or even for how to take cars off the road.



"I like this community because it's near transportation that I need. Buses and trains are a few minutes away when walking. I can get where I need to go. It's very convenient; the transportation is very good. It's important to me because I no longer own a car and I'm a senior."

Clara Chan, resident of Hillcrest Gardens in Daly City

#### **BUS RAPID TRANSIT (BRT):**

BRT systems have seen successes in megacities around the world for over four decades but have only recently been introduced in the United States. BRT is a cost-effective and efficiently constructed form of transit that combines the best qualities of local buses and light rail. BRTs add new, efficient and clean buses to existing routes, and create right-of-way lanes for buses. BRT incorporates efficient fare-collection methods, level boarding to accommodate disabled riders, weather-protected station stops, and priority traffic signals at intersections for BRT buses.

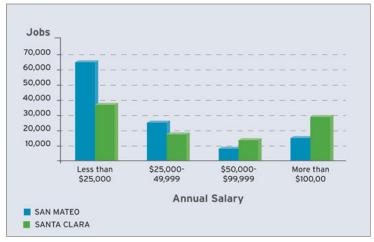
BRT may be a viable option for the three busiest local bus routes in the VTA system, which serve seven cities in both counties. They each run along major thoroughfares, including Stevens Creek Boulevard and El Camino Real. Expanding the light rail system to include these bus routes would be too costly and disruptive to justify, but BRT may offer an alternative.

### WHERE IS THE FUTURE NEED?

The largest and fastest growing job sector is in the lowest income range, under \$25,000 (see *Figure 9*). This workforce, including retail clerks, home care aides, food prep cooks and cashiers, is expected to expand by over 102,000 new jobs in Silicon Valley by 2018. The next high-growth segment (\$25,000 to \$49,999) will create over 43,000 jobs across both counties, including customer service representatives, janitors, office clerks and security guards.

# Projected Job Growth by Annual Salary

(2008-2018) (figure 9)



Sources: California Employee Development Department (EDD), Top 20 Occupation Categories based on number of job openings.

Combined, the two fastest growing job sectors will mean over 67 percent of job growth will create a new pool of low-income workers who will put more pressure on the housing market. The current gap plus the new demand in the housing supply will result in more cars on the road if nothing is done to add more homes to meet all needs.

# RECOMMENDATIONS FOR NEXT STEPS

As Silicon Valley continues to grow, its future prosperity will depend on a coordinated effort to create more options for all who work in Silicon Valley to live closer to where they work, and make it easier for them to get around without a car. The following is a roadmap for next steps.

#### HELP EXISTING RESIDENTS

Revitalization efforts should ensure against unintended consequences such as losing current residents who already use public transit and take advantage of living near where they work, shop, learn, worship and play. For example, with the proposed BART expansion from Fremont to downtown San Jose, it will be crucial to ensure that local bus service is not reconfigured to connect to regional transit stations at the expense of local commuters. Additionally, it is important to ensure that transit-oriented development near BART expansion stations prevents displacement of existing residents and small businesses. Policies can focus on preserving existing affordable homes; encouraging acquisition and rehabilitation of foreclosed homes; enforcing health and building codes to ensure long-term building habitability; and limiting conversion of rental apartments into condominiums. Other tenant protections include just cause/fair rent laws, relocation assistance, tenant eviction protection in foreclosed rental properties, the right for current tenants to buy a property, rental and utility assistance, no-interest loans for property maintenance, and loan counseling to low-income homeowners at risk of foreclosure.

#### **FUND AFFORDABLE HOUSING**

Nearly all new housing affordable to lower income households is created through partnerships between government agencies and private developers, often non-profits. Public funding is crucial to ensure financial feasibility and affordability. Presently, federal and state investments in affordable housing account for only 40 to 60 percent



# A Success Story: Peninsula Station, San Mateo MidPen Housing

Carmen and her husband were laid off at the height of the economic downturn in 2009 and forced to move into a shelter. Their luck changed when they were picked out of a lottery of a pool of over 1,000 applicants to become residents in Peninsula Station, an award-winning affordable apartment community in the heart of San Mateo, close to Hillsdale train station, the Hillsdale Mall, and other major job centers. Carmen and her husband found jobs close to where they live, and now take the train to work, and their children walk to school.

of the development cost. The gap is filled by local sources, which are often the first funds committed to a project. They enable a developer to purchase land or develop architectural plans. In this way a small local investment is leveraged to secure private financing as well as compete for state and federal dollars.

Communities use a variety of local sources, including general fund dollars, but cities that are serious about addressing housing needs often dedicate on-going revenue for affordable housing from many sources, including:

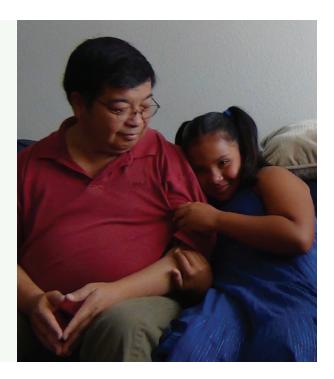
Jobs-Housing Linkage: These are typically one-time fees that local governments place on commercial developments to offset the increased housing need created by new jobs. These can also be called "affordable housing mitigation" or "commercial linkage fees." This is similar to requirements for residential developers to offset the school impacts caused by their development. Communities in San Mateo and Santa Clara counties that have the linkage fee include Cupertino, Mountain View, Sunnyvale, Palo Alto and Menlo Park.

"I used to drive and take the car with me, leaving my wife at home with the kids and no car. We needed to find a place we could afford to live where she didn't need a car. Now that I don't have a car, it's really convenient to be so close to light rail so that I can get to work, our children's schools, and other transit options.

It's easy for us to go where we need to. We are

Ricardo Choy, resident of Riverwood Grove Apartments in the City of Santa Clara Housing Trust Funds: This is an innovative model already being used in Silicon Valley—San Mateo's Housing Endowment and Regional Trust and the Housing Trust of Santa Clara County. The organizations work with local jurisdictions and private funders to make loans to affordable housing developers and help first-time homebuyers with down-payment loans. Funding for these organizations should be increased. An example of how to do so includes the City of San Francisco, which commits a portion of its hotel tax revenues to affordable housing development and is considering dedicating a portion of future property taxes on new homes to affordable housing programs.

Housing Impact Fees: Similar to jobs-housing linkage fees, these fees are based on the idea that every person that moves into a market-rate home will generate a need for services that require employees who make less than the median income, such as hair dressers, coffee baristas, gardeners, healthcare workers and teachers. After a study is completed, a fee would be charged to the developer of new market-rate housing (sometimes



very lucky."

including additions and improvements to existing homes). The city of San Carlos currently has this model and it is being considered by Mountain View as well.

Inclusionary Housing: These local programs require that market-rate residential developments include some affordable housing. The goal is to establish a relatively permanent stock of affordable homes, which can be either rental or home-ownership. Although most Santa Clara and San Mateo jurisdictions currently have inclusionary policies, many could be strengthened to include a higher percentage of affordable homes, deeper affordability levels, or more flexibility for the city to obtain fees in lieu of construction.

#### **IDENTIFY SITES FOR AFFORDABLE HOMES**

Communities throughout Santa Clara County and San Mateo County should identify and rezone sites to make well-designed workforce housing feasible. Sites should be close to amenities like transit, grocery stores and downtown corridors.

# REWARD COMMUNITIES THAT BUILD AFFORDABLE, TRANSIT-ORIENTED HOMES

The Metropolitan Transportation Commission (MTC) oversees a budget of over \$9 billion a year for transportation improvements, operations, and investments for the Bay Area. One specific program, the One Bay Area Grant, will direct transportation dollars to areas where population is expected to grow, therefore benefiting the greatest number of people.

#### PROVIDE MORE FUNDING FOR LOCAL TRANSIT

Increase funding for local transit to put it on a sustainable and equal footing with other transit services, such as regional rail. Transit funds come from the same pool of resources, so funding systems that favor higher-income, Caucasian riders will be at the expense of those that serve lower-income riders and communities of color. At minimum, bus service cuts should be restored before investments are made in any transit capital expansions. Decision-makers historically favor capital projects despite the fact that federal funds only provide an 80 percent match for capital development such as BART extension

Bus Rapid Transit (BRT) can be a cost-effective and efficiently constructed form of transit that would combine the best qualities of local buses and light rail.

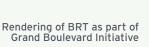




Image courtesy of Santa Clara Valley Transportation Authority

or a new Bus Rapid Transit (BRT) line, but little to no support for operations (such as increasing local bus service). Also, special consideration should be made when evaluating the impact of fare changes so that some riders do not bear most of the burden.

# CREATE FINANCIAL INCENTIVES FOR TRANSIT USE BY WORKERS AND RESIDENTS

Silicon Valley has good examples that can be expanded or replicated: VTA offers discounted Eco Passes for employers to offer to full-time employees and programs for residents in affordable housing; and San Francisco Municipal Transportation Agengy (MUNI) recently approved a 2-year pilot program that would provide a free transit pass for low-income youth in San Francisco. When programs are expanded to support services used by groups that are more likely to use and depend on transit, like low-income residents, students and youth, there are beneficial outcomes for social equity, school and job access, and public health.

# INCREASE NUMBER AND FREQUENCY OF LOCAL TRANSIT ROUTES

Transit operators should improve existing transit services, including maintenance and operations, to increase service for current users, and create new connections that take people from where they are to where they need to go. Investments should be prioritized for places where there is greatest transit dependence. Resources can be redirected away from costly capital expansions on systems that do not significantly improve ridership yet carry high operating expenses. Alternatives, such as Bus Rapid Transit (BRT), should be explored for Silicon Valley to build on an existing ridership.



#### Moving Silicon Valley Forward

By following these recommendations and others that may emerge, Silicon Valley will be on a better footing to face the challenges or to reap the benefits of a recovering economy. If elected officials and policymakers represent the whole community and what is best for all, then investments and policies should be prioritized to match the real needs. The call to action must be to ensure that all Silicon Valley workers have a fair chance and choice to find an affordable place to live near where they work, and be close to reliable transit. In doing so, the benefit goes to all residents as traffic congestion can be improved. We have opportunities before us now to chart a better course for how the region develops, and to move Silicon Valley forward.

### **ENDNOTES**

- <sup>1</sup> Texas Transportation Institute. (September 2011). 2011 Urban Mobility Report. Accessed February 29, 2012, http://mobility.tamu.edu/files/2011/09/sanjo.pdf.
- <sup>2</sup> Bay Area Air Quality Management District. (February 2010). Source Inventory of Bay Area Greenhouse Gas Emissions. Accessed March 2012, http://www.mtc.ca.gov/planning/climate/Bay\_Area\_Greenhouse\_Gas\_Emissions\_2-10.pdf
- <sup>3</sup> U.S. Census Bureau. Longitudinal Employer-Household Dynamics, "On the Map: Origin-Destination Database." Accessed October 2011, http://lehdmap.did.census.gov/.
- <sup>4</sup> U.S. Census Bureau. *American Community Survey* 2006–2008 three-year estimate. http://www.census.gov/acs/www/.
- <sup>5</sup> U.S. Census Bureau. Longitudinal Employer-Household Dynamics, "On the Map: Origin-Destination Database." Accessed October 2011, http://lehdmap.did.census.gov/.
- <sup>6</sup> Integrated Public Use Microdata Series (IPUMS), Department of Housing and Urban Development (HUD), Seifel Consulting Inc. Severe Housing Cost Burden by Race and Ethnicity, 2007–2009 three-year estimates.
- <sup>7</sup> Center for Housing Policy. (October 2006). A Heavy Load: The Combined Housing and Transportation Burdens of Working Families.
- 8 Ibid.
- <sup>9</sup>U.S. Census Bureau. *American Community Survey* 2006–2008 three-year estimate http://www.census.gov/acs/www/.
- <sup>10</sup> Santa Clara County Valley Transportation Authority. 2009 VTA Annual Transit Service Plan. http://www.vta.org/news/ service\_changes/09\_asp.html.
- <sup>11</sup> Multiple sources:

Capital data to account for amortization: National Transit Database. (2010). Accessed February 1, 2012, http://www.ntdprogram.gov/ntdprogram/cs?action=showRegionAgencies&region=9d.

Operations and ridership data: Metropolitan Tansportation Commission. (2010). Statistical Summary of Bay Area Transit Operators (FY2001 through FY2010). Accessed February 1, 2012, http://www.mtc.ca.gov/library/statsum/statsum.htm.

Ridership of color data was taken from each operator's most recently conducted transit passenger surveys. Where modalspecific data was unavailable, data was taken from MTC's Draft Funding Analysis to Implement Environmental Justice Principle #2, (http://apps.mtc.ca.gov/meeting\_packet\_documents/ agenda\_739/5b\_MTC\_Funding\_Analysis\_Report\_Draft\_9-8-06\_ pg.pdf). Since multiple answers were accepted for the ethnicity category in passenger surveys, the percent people of color reflects the low-end estimate for ridership of color with the exception of BART, which separated out multiple respondents with multiple checkboxes. Ridership of color was calculated by subtracting the percentage of "white" responses from 100 percent. Without the raw data, we are unable to determine the number of respondents who may be considered a person of color for selecting both white and another race or multiple other races. Survey year varies by operator: Caltrain 2010, BART 2008, SamTrans 2009, VTA 2007. To account for inflation, capital and operations data were rebased to FY2010\$ using the U.S. Bureau of Labor Statistics Consumer Price Index of all urban consumers: Series ID—CUURA422SA0, CUUSA422SA0; Area—San Francisco-Oakland-San Jose, California.

- <sup>12</sup> U.S. Department of Transportation, Federal Transit Administration. (September 2006). *Title VI Fare Increase* Compliance Review of Santa Clara Valley Transportation Authority.
- <sup>13</sup> Non-Profit Housing Association of Northern California. (October 2011). *Transportation and Land-Use Impacts on Sustainable Affordable Housing*. http://nonprofithousing.org/pages/publications-and-press-room/publications.html.





