# Healthy Places, Healthy Regions

A CLOSER LOOK AT OPPORTUNITIES TO INVEST IN HEALTH AND SUSTAINABILITY IN SAN MATEO AND SANTA CLARA COUNTIES



The regional Sustainable Communities Strategy planning efforts under way throughout California provide a unique opportunity for infrastructure investments that can improve public health, economic vitality, and environmental sustainability. Because resources are limited, it is paramount to identify neighborhoods where these investments will do the most to create changes that will address health inequities and help people lead healthier lifestyles. This report identifies key "Healthy Priority Development Areas": places where creating safer, more walkable, mixed-income neighborhoods could produce the greatest improvement in public health and equity.







### **Planning for Healthier Regions**

The Bay Area's regional Sustainable Community Strategy (SCS) provides an opportunity to reduce chronic disease rates, create jobs, and improve environmental conditions while making healthy lifestyle choices easier. A big part of this strategy involves identifying and investing in regionally designated Priority Development Areas (PDAs). Local and regional agencies will focus significant planning and financial resources in these PDAs to develop more housing, services, and transportation amenities to create walkable, mixed-use communities.

But to make this vision a reality and maximize health co-benefits, investments should be directed where they can have the most impact. Were the selected PDAs really the places where investments would maximize health equity, or were there missed opportunities? What policy adjustments might be recommended to link the PDAs to areas of most need?

Healthy Priority Development Area: A place where investments in built environment infrastructure will achieve the greatest improvement in public health and equity.

A study of Santa Clara and San Mateo counties finds that Healthy Priority Development Areas are located both within and adjacent to neighborhoods that are already designated as PDAs.

To maximize the health, economic, and environmental benefits, decision makers should prioritize infrastructure and community development activities that link the residents living in Healthy Priority Development Areas adjacent to the PDAs in order to help create more interconnected, vibrant communities.

### Health & Sustainability: What's the Link?

California's Sustainable Communities and Climate Protection Act (Senate Bill 375) was designed to coordinate investments in transportation networks with the projected growth in housing and job centers to reduce greenhouse gas emissions from vehicle trips.<sup>2</sup> Many of SB 375's land use and transportation planning strategies have tremendous potential to achieve multiple "co-benefits," including increased physical activity, improved local air quality, stronger economic resiliency, and fewer health disparities.

SB 375 provides more choices for Californians about where to live, work, and shop, and whether they can use transit or "active transportation" (that is, biking and walking) to make daily trips. When neighborhoods contain a mixture of jobs, retail, services, and housing types connected by a network of convenient public transit stops, safe sidewalks, and bikeways, people can drive less and get more exercise, limit car-produced air pollution, and build local economic wealth. For example:

#### **Health Benefits**

- Studies have shown that the more time a person spends in the car, the greater the likelihood that person will become obese. For every hour spent in the car each day, the risk of being obese increases 6 percent.<sup>3</sup> Conversely, for each hour walked per day, people are about 5 percent less likely to be obese.<sup>4</sup>
- Almost a third of Americans who commute to work via public transit meet their daily requirements for physical activity (30 or more minutes per day) by walking as part of their daily life, including to and from the transit stop.<sup>5</sup>

#### **Air Quality Benefits**

Mixed-use communities – where residences, businesses, and offices are located near each other with more opportunities to use public transit, walk, and cycle – can improve health and reduce pollution. A recent study by the American Lung Association in California projects that in 2035 future development of compact mixed-use communities has the potential to reduce air pollution in California by up to 132,000 tons, prevent up to 140 premature deaths, avoid up to 16,550 lost work days, and eliminate up to \$1.66 billion in health care costs.<sup>6</sup>

#### **Economic Benefits**

- Neighborhoods with a range of housing types within walking distance of shops and services are popular with renters, first-time homebuyers, families, and empty nesters, helping to create intergenerational and diverse communities. Indeed, according to the National Association of Realtors, 83 percent of Americans support building communities where people walk more and use their car less?
- Mixed-use residential developments designed to maximize access to public transit can help local governments reduce overall infrastructure construction, expansion, and maintenance costs by up to 25 percent.
- Mixed-use developments near transit hubs can generate more than five times as much property tax revenue per acre as sprawling, single-use developments, including "big box" retail malls.9

### **Mapping Opportunities**

Public Health Law & Policy partnered with Brian Fulfrost and Associates and the California Center for Public Health Advocacy to identify specific healthy development opportunities in San Mateo and Santa Clara counties. We did this by developing a set of measurable and quantifiable health equity metrics that were then used to pinpoint "Healthy Priority Development Areas" – neighborhoods where investments in the built environment will have the greatest impact on public health and equity.

To identify Healthy Priority Development Areas, we developed a "HealthScore" – an index that combines information about walkability, safety, environmental pollution, and chronic disease. (For more information, see "Calculating the HealthScore" on p.7).

We consulted with epidemiologists, transportation modelers, social justice advocates, and public health practitioners to help choose metrics that could highlight the intersections between health, equity, economic, and environmental factors. We selected indicators that affect health and are indicative of sustainable community planning. Our purpose was to elevate health and equity priorities on a par with other quantifiable outcomes currently included in the SCS.

### Step 2

#### What the HealthScore Tells Us

The table below presents information about those communities where Healthy Priority Development Areas were identified (census blocks classified as communities of concern with low HealthScores). They are indicated in red on the accompanying maps. Communities are listed in the table in descending order, based on the percentage of census blocks that are Healthy Priority Development Areas.<sup>12</sup>

To receive a low HealthScore, a census block must have:

- Low walkability score (difficult to walk because of infrastructure problems and lack of nearby destinations) or a low safety score (potentially unsafe to walk because of bicyle and pedestrian injuries and/or neighborhood crime) AND,
- High environmental exposure (unhealthy levels of air pollution from highways) or a high chronic disease
   score (significant hospitalization rates for heart disease, asthma, and diabetes)

Because communities experience different degrees and combinations of the four factors taken into account for the HealthScore, policies to improve public health will vary from one community to the next. For example, jurisdictions with high walkability but low safety scores may want to focus on improving public safety using crime prevention through environmental design (CPTED) strategies. Communities where walkability is poor may want to focus on making changes to the built environment and improving access to services.

City	Percentage of Census Blocks that are Healthy Priority Development Areas	Percentage of Healthy Priority Development Areas with Low Walkability Score	Percentage of Healthy Priority Development Areas with Low Safety Score	Main Issue(s) Contributing to Low HealthScore
East Palo Alto	86%	5%	100%	very low safety
Broadmoor <sup>13</sup>	25%	70%	31%	low walkability / low safety
Daly City	17%	86%	14%	very low walkability
Gilroy	17%	37%	100%	very low safety/very low walkability
San Bruno	11%	19%	81%	low safety
South San Francisco	9%	15%	100%	very low safety
Millbrae	6%	20%	80%	low safety / low walkability
San Mateo	6%	9%	91%	low safety
San Jose	6%	26%	100%	very low safety/very low walkability
Colma	2%	0%	100%	very low safety
Campbell	2%	92%	100%	very low walkability / very low safety

### Step 3

### What the Maps Show Us

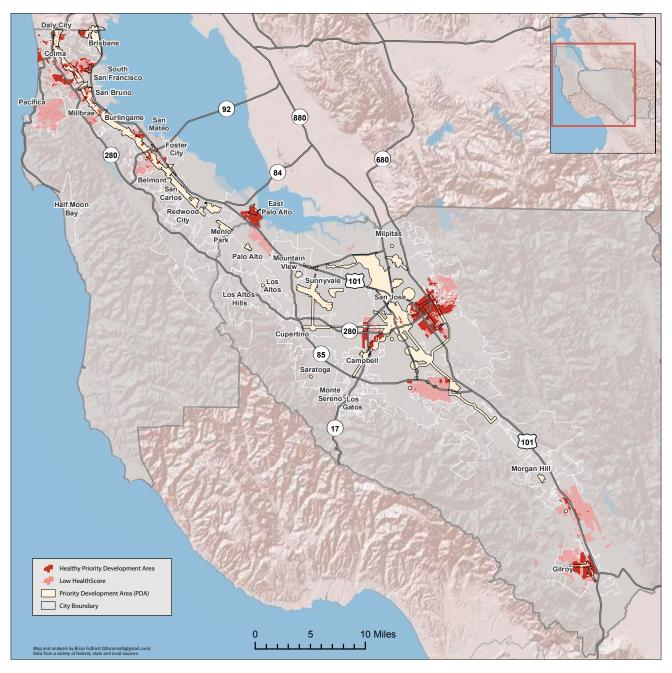
Our next step was to examine whether or not the Healthy Priority Development Areas overlapped – or failed to overlap – with the PDAs identified by the San Francisco Bay Area's regional planning agency.

The resulting maps highlight those places in San Mateo and Santa Clara counties where strategic land use and

transportation planning efforts along with infrastructure investments could achieve maximum health equity benefits. These maps and recommendations are designed to guide elected officials, planners, and community stakeholders to focus their efforts on our most underserved neighborhoods.

There is some overlap between the agency-identified Priority Development Areas (PDAs) and the Healthy Priority Development Areas, but a significant number of the Healthy Priority Development Areas are located just outside and

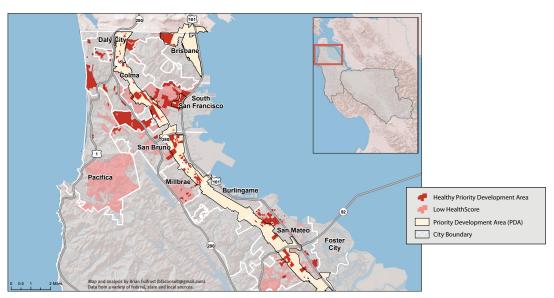
A REGIONAL LOOK
Healthy Priority Development Areas in San Mateo and Santa Clara Counties



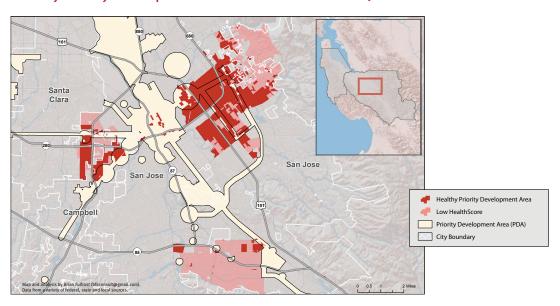
adjacent to the PDAs. While the PDAs focus on planning and investing along the "core and corridor" transportation routes in communities, the mapping results highlight the importance of planning for and linking these to the surrounding neighborhoods via active transport and transit.

In San Mateo County, for example, the Grand Boulevard Initiative offers a unique opportunity to build this type of connectivity along portions of the historic El Camino corridor where the Healthy Priority Development Areas are adjacent to the designated PDAs. Creating affordable housing, planning for mixed land use patterns, building an interconnected transportation infrastructure, and attracting shops and services that meet the needs of all residents could create complete and unified neighborhoods. This type of integrated planning linking the Healthy Priority Development Areas to the designated PDAs can bring health, equity, and environmental benefits to underserved residents.

A CLOSER LOOK
Healthy Priority Development Areas Along the Peninsula



A CLOSER LOOK
Healthy Priority Development Areas Near Downtown San Jose



### **Policy Recommendations**

As communities work to create neighborhoods where residents can bike and walk more to the services and resources they need, different types of policies may be necessary given the underlying conditions (lack of sidewalks, personal safety concerns) that may be discouraging the use of "active transportation" (biking or walking). Jurisdictions have an opportunity to work on local policies now that will support SB 375 regional planning efforts and create economically resilient, environmentally sustainable, and healthy communities. For example:



# Promote the Development of Complete Neighborhoods

Communities can update general plans and amend zoning codes to allow for neighborhood design that encourages compact, walkable, mixed-use developments where a variety of housing types are located close to offices, grocery stores, shops, services, and public spaces that meet people's needs. Neighborhoods like these increase opportunities for people to lead more active and healthy lifestyles by biking and walking more. Studies also show that these types of developments attract new business and increase municipal revenues through real estate taxes. To learn more, go to:

- Public Health Law & Policy: www.phlpnet.org/healthy-planning
- Urban Land Institute: www.uli.org
- Local Government Commission: www.lgc.org
- National Association of Realtors: www.realtor.org/government\_affairs/smart\_growth



Planning efforts should be focused on creating walkable/bikeable neighborhoods with housing that is affordable and available for working families, senior citizens, and others on a limited or fixed income. Designing mixed-use developments that include a range of housing types to accommodate residents with a variety of income levels is a key way to ensure that seniors and children can remain in the community and don't have to move away to find housing they can afford. To learn more, go to:

- Housing California: www.housingca.org
- Housing Leadership Council San Mateo County: www.hlcsmc.org



# Implement Complete Streets Policies to Support Active Transportation

To give people choices about what type of transportation they want to use, streets need to be designed so they are safe and convenient for everyone in the neighborhood, whether walking, cycling, riding public transit, or driving. Known as "complete streets," these include such features as sidewalks, bike routes, special bus lanes, frequent and safe crossing opportunities, and comfortable and accessible public transportation stops, among other amenities. Complete streets are a critically important means of connecting those Healthy Priority Development Areas adjacent to the PDAs. While complete streets policies are mandated to be included as part of a general plan update, 14 jurisdictions can be proactive and design and build complete streets now. To learn more, go to:

- National Complete Streets Coalition: www.completestreets.org
- National Policy and Legal Analysis Network to Prevent Childhood Obesity (NPLAN): www.nplan.org/nplan/ products/what-are-complete-streets-fact-sheet
- Model Design Manual for Living Streets: www.modelstreetdesignmanual.com



# Design for Community Safety to Support Walking and Biking

Even if a neighborhood has the infrastructure and amenities in place to make biking or walking convenient, actual or perceived threats to personal safety can be a significant barrier. Violence and the fear of violence are disproportionately experienced in communities of concern and represent a very real challenge – one that must be overcome in order to improve opportunities for people to lead more physically active lifestyles. Building partnerships between law enforcement, residents, business owners, and other neighborhood organizations is an important step. Incorporating crime prevention features into the design of a new building or community developments is also an important strategy. To learn more, go to:

- Local Initiatives Support Corporation: www.lisc.org/section/ourwork/national/safety
- Prevention Institute: www.preventioninstitute.org/ focus-areas/preventing-violence-and-reducing-injury/ connecting-safety-to-chronic-disease.html



## Integrate Health Goals in Land Use Planning

Given the impact the built environment can have on people's health, it is important to incorporate health improvement objectives in land use planning documents such as general plans and specific/area plans. Including goals and objectives to enhance active transportation or public safety can be especially important to improve conditions in communities of concern. Health impact assessments, healthy development checklists, and other tools can help decision makers and planners choose options that will do the most to maximize health benefits. To learn more, go to:

- Public Health Law & Policy: www.phlpnet.org/healthyplanning/participating-planning-process
- Building Health Into San Mateo County Cities: http://tinyurl.com/BuildingHealthIntoSanMateo
- Health Development Measurement Tool: www.thehdmt.org



# Adopt a Healthy Eating Active Living (HEAL) Resolution

By adopting a HEAL Cities Campaign resolution containing policies to improve the physical activity and food environments for all residents, your community will become part of a statewide movement endorsed by the League of California Cities. More than 90 cities across California have adopted HEAL resolutions and committed to implementing programs that improve opportunities for people to live more healthy lifestyles. To learn more, go to:

Healthy Eating Active Living Cities Campaign: http://healcitiescampaign.org

# Calculating the HealthScore

A "HealthScore" was calculated for each census block (with population densities of 500 people or more per square mile) in Santa Clara and San Mateo counties. The HealthScore combines four indexes:



Walkability – An assessment of the elements of the built environment that promote or hamper biking and walking (street type, bike lanes, etc.) and the location of important community destinations (schools, transit stops, food retail, etc.) within one-half mile of each census block (a standard walkable distance).



Safety – The number of collisions involving bicyclists or pedestrians (per capita within each census block); and the number of incidences of violent and property crime (per capita within each city).



**Environmental Exposure** – Levels of particulate matter (PM 2.5) for census blocks adjacent to highways.<sup>15</sup>



**Chronic Disease** – Incidences of hospitalization for heart disease, asthma, and diabetes reported by zip code.<sup>16</sup>

### A census block received a Low HealthScore if:

The value of the Walkability index OR Safety index were in the lowest 40 percent

AND

The value of the Environmental Exposure index OR Chronic Disease index were in the lowest 20 percent

#### A census block is a Healthy Priority Development Area if:

It is classified as a "Community of Concern" – a census block that has at least 70 percent minority or 30 percent low-income residents

AND

It has a Low HealthScore

For more information about data sources and methodology used to develop the maps, contact Brian Fulfrost and Associates at bfaconsult@gmail.com.

#### **Endnotes**

- 1 Priority Development Areas (PDAs) are locally-identified, infill development opportunity areas within existing communities where there is commitment to developing more housing along with amenities and services to meet the day-to-day needs of residents in a pedestrian-friendly environment served by transit. To learn more about these go to: www.bayareavision.org/initiatives/prioritydevelopmentareas.htm.
- 2 For more information on Senate Bill 375 (SB 375), see Public Health Law & Policy's publication "Senate Bill 375: An Opportunity to Design Healthy, Sustainable Communities." Available at www.phlpnet.org.
- 3 Frank LD, Andresen MA, and Schmid TL. "Obesity Relationships with Community Design, Physical Activity and Time Spent in Cars." American Journal of Preventive Medicine, 27(2): 87-96, 2004. Abstract available at: www.ncbi.nlm.nih, 2007/pubmed/1542518904.
- 4 Frank LD, Andresen MA, and Schmid TL. "Obesity Relationships with Community Design, Physical Activity and Time Spent in Cars." *American Journal of Preventive Medicine*, 27(2): 87-96, 2004. Abstract available at: www.ncbi.nlm.nih.gov/pubmed/15261894.
- 5 Besser LM and Dannenberg AL. "Walking to Public Transit: Steps to Help Meet Physical Activity Recommendations." *American Journal of Preventative Medicine*, 32(4): 273 80, 2005. Abstract available at: www.ncbi.nlm.nih.gov/pubmed/16242589.
- 6 American Lung Association in California. Smart Growth will Help California Avoid Air Pollution-related Illnesses, Deaths and Costs. 2010. Available at: www.lungusa.org/associations/states/california/assets/pdfs/advocacy/alac\_smart-growth.pdf.
- 7 ClimatePlan. SB 375 Fact Sheet: Maximizing Economic Growth. 2010. Available at: www.climateplan.org/wp-content/uploads/2011/05/SB375\_econ\_fact\_sheet.pdf.
- 8 California Department of Transportation, Business Transportation and Housing Agency. Statewide Transit-Oriented Development Study: Factors for Success in California (Final Report). 2002. Available at: www.dot.ca.gov/hq/MassTrans/TOD/sw-study-final-report-Sept2002.pdf.
- 9 Langdon P. "Best Bet for Tax Revenue: Mixed-use Downtown Development." Better! Cities & Towns (formerly New Urban Network), Sept. 13, 2010. Available at: http://newurbannetwork.com/article/best-bet-tax-revenuemixed-use-downtown-development-13144.
- 10 Although the results of this study concentrates on two counties in the San Francisco Bay Area, Public Health Law & Policy and its partners designed the indicator and mapping framework to be a robust, replicable, and credible modeling process that can be readily adapted and integrated into parallel planning efforts. The metrics used to create a "HealthScore" utilize publicly available datasets, and the analysis applied here could be used to inform regional SB 375 and local land use decisions throughout California, or even other states' regional transportation and land use planning processes.
- 11 This project builds upon the work of others, including Human Impact Partners, the Metropolitan Transportation Commission, and the Bay Area Air Quality Management District.
- 12 Cities with higher HealthScores are not included in the fact sheet, but their data can be requested by contacting Brian Fulfrost and Associates at bfaconsult@gmail.com.
- 13 The community of Broadmoor is listed separately, even though it is part of unincorporated San Mateo County, because of the significant percentage of its area that is classified as a Healthy Prioirty Development Area.
- 14 In 2008, the California legislature adopted a state law (AB 1358) that requires cities and counties to include Complete Streets policies as part of their general plans.
- 15 These levels are calculated by models prepared by the Bay Area Air Quality Management District (BAAQMD).
- ${\bf 16}\,$  The unit of measurement available for these data sets.
- 17 "Communities of Concern" were defined by the Association of Bay Area Governments (ABAG) during the last Regional Transportation Planning process. A Community of Concern is a census block that has at least 70 percent minority or 30 percent low-income residents, where low-income is defined as being below the California Department of Health Care Services "low-income" eligibility requirement for health care services (equivalent to 200 percent of the federal poverty level).

### Acknowledgements

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> www.phlpnet.org www.healcitiescampaign.org bfaconsult@gmail.com

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