# Leveraging Land Use and Economic Development Practices to Improve Health Disparities



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### SOLUTIONS-ORIENTED CONVERSATIONS IMPROVING HEALTH POLICY

Over the past 50 years, we have seen land use trends and policies that contribute to new public health crises including obesity, hunger, and related conditions. We are also discovering through our measurement of health disparities that populations which live in differing environments face varying risks for poor health.

Much of the conversation in the Smart Growth land use planning movement has focused on increasing the physical activity side (safe, walkable communities) of the community planning equation. This policy brief examines the intersection among land use, economic development and public health roles in facilitating adoption of healthy nutrition practices. This policy brief also recognizes that a focus solely on the health behavior of individuals, without attending to the context of that behavior, is ineffective to creating change and, indeed, may create unintended negative health consequences.<sup>1</sup>

## State-Private Partnership: Pennsylvania Fresh Food Financing Initiative (FFFI)

The FFFI, a public-private partnership, aims to increase access to healthy foods in low income communities. The partnership brings together the Commonwealth of Pennsylvania, The Food Trust, the Greater Philadelphia Urban Affairs Coalition (GPUAC), and The Reinvestment Fund (TRF) to establish an \$80 million financing pool to support infrastructure costs and financing for grocery store development. Supermarket developers are also able to participate in Pennsylvania's First Industries program, a \$100 million grant and Ioan program aimed at strengthening Pennsylvania's farming and tourist industries.<sup>5</sup>

The Healthy Corner Store Initiative makes funds available to smaller neighborhood food retailers who purchase or upgrade refrigeration systems for fruits and vegetables. This access to funding and related technical assistance, generates economic benefits for communities by providing opportunities for small business owners and creating jobs for local residents. The program will also increase community access to fresh, nutritious, low-cost food items that are costprohibitive for smaller stores to stock due to their limited purchasing power.<sup>6</sup>

## **Obesity: Data and Consequences**

Genetics, calorie intake and physical activity levels contribute to the conditions for overweight and obesity. Land use and economic development policies significantly influence the latter two contributing factors through the choices provided to "at risk" populations.

The prevalence of overweight in Californians has increased from 38 percent in 1984 to 57 percent in 2003. While all gender, age, and race/ethnic groups have shown an increase during the past decade, Californians below the poverty level who are disproportionately affected are African American, Latino, and American Indian/Alaska Native adult populations.<sup>2</sup>

California youth also feel the effects of the obesity epidemic. Currently, about one in three children and one in four teens are "at risk for overweight" or already overweight.<sup>3</sup> Overweight and "at risk for overweight" disproportionately affect California's Latino and African American adolescents.<sup>4</sup>

## **Overweight and Hungry**

How can obesity and hunger coexist within the same community, family, or even individual? While obesity is growing in all population groups, food insecurity is almost entirely limited to low-income communities. Food security requires the ready availability of nutritionally adequate and safe food that can be acquired without scavenging, stealing, or resorting to emergency supplies.<sup>7</sup> California ranks 11th among U.S. states in the percentage of households experiencing food insecurity, higher than Kentucky, Alabama, Louisiana, Arkansas, and Tennessee.<sup>8</sup>

Public food programs only address part of the problem. California's food stamp program reaches only 49% of eligible adults in the state.<sup>9</sup> When faced with continuing food insecurity and the lack of healthy food choices, many families adopt adaptive behavior that results in:

- Maximizing calorie intake per dollar resulting in consumption of high fat and low nutrient foods
- Sacrificing food quality for the sake of food quantity
- Overeating when food is available<sup>10,11</sup>



## Land Use Planning Tools to Improve Health

The built environment has a powerful impact on health choices and outcomes. How do planners and public health leaders begin to put the issue of obesity prevention on the same playing field as transportation, air quality and economic development considerations? Conversations and education across disciplines is required to determine what policies, regulations and incentives are needed to enable change to occur.

**General Plan Requirements.** California General Plan law creates the legal framework in which local governments develop General Plans which serve as the constitutions for future development. General Plan law neither requires nor prohibits a community health element. No California municipality has currently adopted a health element.

The state of California's obesity-attributable healthcare costs were approximately \$7.7 billion between 1998 and 2000, the largest state-level expenditure in the U.S.

Source: CDC, Division of Nutrition and Physical Activity, National Center for Chronic Disease Prevention and Health Promotion. *Overweight and Obesity: Economic Consequences*, March 2006. **Zoning to Create Healthier Food Choices.** California cities have passed zoning laws that reduce alcohol availability by restricting the density and location of alcohol retailers. While there are studies that provide evidence of the relationships between alcohol availability and alcohol-related health problems,<sup>12</sup> municipalities have used public safety and law enforcement powers for the zoning change.

A similar linkage exists between fast food intake, unhealthy diets and obesity. Studies have found an association between eating fast food and increased energy intake, higher fat intake and overweight status.<sup>13</sup>

Municipalities can regulate the location and density of fast food outlets. Zoning may prove to be a useful tool for reducing access to fast food restaurants and encouraging healthier alternatives.<sup>14</sup> The city of Detroit through its zoning ordinance requires a minimum of 500 feet between fast food outlets and public school sites.

Zoning can promote fixed retail food outlets such as grocery stores. Additionally, zoning regulations can increase the availability and use of farmers' markets and community gardens. These are important sources of low cost healthy foods that strengthen community communication and cooperation, and help to sustain local agricultural production.<sup>15</sup>

Health Impact Assessments<sup>16</sup> (HIAs). Endorsed by the World Health Organization and the Centers for Disease Control and Prevention, HIAs use various methods to judge a land use project for its potential effects on the health of a population. England, Canada and Thailand use these measures to complement environmental quality reports. Technically, the California Environmental Quality Act (CEQA) contains a clause that addresses human health impacts. As implemented, CEQA

#### Endnotes

- I Cohen L, Perales DP, & Steadman C. "The O Word: Why the Focus on Obesity is Harmful to Community Health." *California Journal of Health Promotion.* 2005; 3(3):154-161. Accessed at http://www.preventioninstitute.org/documents/oword.pdf on April 4, 2006.
- California Obesity Prevention Initiative (COPI). The Obesity Problem. California Department of Health Services. July 2004. Accessed at http://www.dhs.ca.gov/ps/cdic/copi/default.htm on April 4, 2006.
- 3 California Obesity Prevention Initiative (COPI), July 2004.
- 4 Babey SH, Diamant AL, Brown ER, and Hastert T. California Adolescents Increasingly Inactive. Los Angeles: UCLA Center for Health Policy Research. 2005. Accessed at http://www.healthpolicy.ucla.edu/pubs/files/TeensInactive\_PB\_040105\_.pdf. on April 4, 2006.
- 5 The Food Trust. Supermarket Campaign: Fresh Food Financing Initiative. Accessed at http://www.thefoodtrust.org/php/programs/super.market.campaign.php#1 on April 4, 2006.
- 6 The Food Trust. Supermarket Campaign. Accessed at http://www.thefoodtrust.org/php/ programs/super.market.campaign.php#4 on April 4, 2006.
- 7 Center on Hunger and Poverty."The Consequences of Hunger and Food Insecurity for Children: Evidence from Recent Scientific Studies." Heller School for Social Policy and Management, Brandeis University. June 2002. Accessed at http://www.centeronhunger. org/pdf/hungerandobesity.pdf on April 4, 2006.
- 8 Crawford PB, Townsend MS, Metz DL, et al. "How can Californians be overweight and hungry?," California Agriculture. 2004; 58(1):12-17, January-March 2004.
- 9 Harrison GG, DiSogra CA, Manalo-LeClair G, et al. "Over 2.2 Million Low-Income California Adults are Food Insecure: 658,000 Suffer Hunger." UCLA Center for Health Policy Research. November 2005.

10 Crawford PB, Townsend MS, Metz DL, et al, 2004.

- 11 Center on Hunger and Poverty and Food Research and Action Center. The Paradox of Hunger and Obesity in America. Brandeis University. July 2003. Accessed at http://www. preventioninstitute.org/documents/oword.pdf on April 4, 2006.
- 12 Ashe M, Jernigan D, Kline R. et al. "Land use planning and the control of alcohol, tobacco firearms and fast food restaurants." *American Journal of Public Health.* 2003; 93(9):1404-1408.
- 13 French SA, Harnack L, & Jeffery RW."Fast food restaurant use among women in the Pound of Prevention Study: dietary, behavioral and demographic correlates." *International Journal of Obesity.* 2000; 24:1353-135 9.
- 14 Mair JS, Pierce MW, & Teret SP. The Use of Zoning to Restrict Fast Food Outlets: A Potential Strategy To Combat Obesity. The Center for Law and the Public's Health at Johns Hopkins & Georgetown Universities. 2005.
- 15 Flournoy R, & Treuhaft S. Healthy Food, Healthy Communities: Improving Access and Opportunities through Food Retailing. PolicyLink; The California Endowment. Fall 2005.
- 16 Feldstein, L. General Plans and Zoning: A Toolkit on Land Use and Health. California Department of Health Services. 2006.
- 17 Center for Food and Justice. Transportation and Food: The Importance of Access. Urban and Environmental Policy Institute, Occidental College. 2002. Accessed at http://departments.oxy.edu/uepi/cfj/resources/TransportationAndFood.htm on December 12, 2003.
- 18 Samuels and Associates, The Aguirre Group & San Francisco State University. The Social and Environmental Experience of Diabetes: Implications for Diabetes Prevention, Management and Treatment Programs: A Series of Case Studies. The California Endowment: San Francisco. 2004.
- 19 The Boston Consulting Group with the Initiative for a Competitive Inner-city. The Business Case for Pursuing Retail Opportunities in the Inner-city. 1998. Accessed at www.icic.org/Documents/pdf\_2\_The\_Business\_Case.pdf. on December 8, 2003.

does not include impacts on human health in its assessment of the effects of a proposed project.

**Transportation Planning.** Residents of inner city communities tend to not only have to travel farther to supermarkets, but also rely more on public transportation or friends or family due to lower rates of automobile ownership. Even with access to automobiles, shopping at supermarkets tends to require longer trips and travel outside of their community.<sup>17</sup>

The situation in rural communities is more difficult given the lack of public transportation options. Rural farmworkers with limited car ownership tend to market in their neighborhood convenience stores.<sup>18</sup> Transportation planning for low-income communities for food shopping at grocery stores and farmers' markets can include routes to healthy foods.<sup>19, 20</sup>

#### **Economic Development Strategies**

Private sector economics may narrowly project the profitability of increased healthy food access to under-served communities. Redevelopment projects such as West Fresno Food Maxx Supermarket and San Diego Market Creek Plaza Food 4 Less have shown the strong correlation among successful economic development projects, community engagement and food access.<sup>23</sup>

#### Low income communities face:

- A scarcity of full service supermarkets<sup>24, 25, 26</sup>
- Neighborhood stores that tend to charge higher prices for food, have fewer food choices, and focus on sales of tobacco, alcohol, and foods with low nutritional value<sup>27, 28</sup>
- Transportation barriers that exacerbate the scarcity of supermarkets<sup>29</sup>

## Grocery Store Development: San Diego Market Creek Plaza

Market Creek Plaza is an innovative public-private partnership that generated a \$20 million, 10-acre commercial center in Southeast San Diego built on the site of an abandoned aerospace factory and community eyesore.<sup>21</sup> The project was based on the premise that residents must own and drive the change in their communities for it to be meaningful. Market Creek Plaza is now fully leased and completely open. When the Plaza's 57,000 square foot Food 4 Less Supermarket opened, it ended a 20-year absence of grocery services in the community.<sup>22</sup>

• Higher prevalence of fast food restaurants<sup>30</sup>

There are positive correlations between the accessibility of supermarkets and consumption of fruits and vegetables and reduction in fat content of diets,<sup>31</sup> and between the relative scarcity of supermarkets and prevalence of diet-related diseases.<sup>32</sup> Considerations for redevelopment agencies include:

- Develop new supermarkets accessible to low-income communities which will provide consumers with lower prices, increased access to healthy foods, less travel time for grocery shopping, and enhanced choice. They also bring economic development benefits through increased employment and tax revenues, and act as anchors for additional retail development.<sup>33</sup>
- Provide technical assistance to smaller community markets to carry fresh fruits and vegetables that can help revitalize small neighborhood businesses and increase
- 20 Nutrinet, University of Minnesota Food and Nutrition Sciences Department. Transportation and Food Security: Background to the Issues. August 2002. Accessed at http://www. fsci.umn.edu/nutrinet/Sept/transportation.htm on April 4, 2006.
- 21 San Diego Metropolitan Uptown Examiner and Daily Business Report. June 28, 2004. Accessed at http://metro.sandiegometro.com/dbr/index. php?dbrlD=618 on April 4, 2006.
- 22 La Prensa. "Market Creek Plaza Food 4 Less Reaches Milestone With Over One Million Shoppers." October 25, 2002. Accessed at http://www.laprensa-sandiego.org/archieve/ october25-02/food.htm on April 4, 2006.
- 23 Flournoy & Treuhaft, 2005.
- 24 Morland K, Wing S, Diaz Roux A, et al. "The Contextual Effect of the Local Food Environment on Residents' Diets: The Atherosclerosis Risk in Communities Study." *American Journal of Public Health.* 2003; 92(11):1761-67.
- 25 Sloane DC, Diamant AL, Lewis LB, et al. "Improving the Nutritional Resource Environment for Healthy Living Through Community-based Participatory Research." J Gen Intern Med. 2003; 18:568-75.
- 26 Shaffer, A. The Persistence of LA's Grocery Store Gap: The Need for a New Food Policy and Approach to Market Development. Center for Food Justice, Urban and Environmental Policy Institute, Occidental College. 2002. Accessed at www.uepi.oxy.edu/cfj on December 8, 2003.
- 27 Bolen E & Hecht K. Neighborhood Groceries: New Access to Healthy Food in Low-Income Communities. California Food Policy Advocates. January 2003. Accessed at www.cfpa. net/Grocery.PDF on December 8, 2003.
- 28 Center for Health Improvement. Supermarket Access in Low-Income Communities. Accessed at www.healthpolicycoach.org/policy\_index.asp#\_on December 8, 2003.
- 29 Hobson J, Quiroz-Martinez J & Yee C. Roadblocks to Health: Transportation Barriers to Healthy Communities. Transportation and Land Use Coalition of Oakland. 2002. Accessed at http://www.transcoalition.org/ on December 12, 2003.

30 Bolen & Hecht, 2003.

- 31 Morland K, Wing S, Diaz Roux A, et al. "Neighborhood Characteristics Associated with Location of Food Stores and Food Service Places." Am J Prev Med. 2001; 22(1)23-29. Accessed at http://www.ajpm-online.net/article/PIIS074937901004032/fulltext on February 5, 2004.
- 32 Perry D. The Need for More Supermarkets in Philadelphia. The Food Trust. Accessed at http://www.thefoodtrust.org/supermarket.html on December 12, 2003.
- 33 Boston Consulting Group, 1998.
- 34 Bolen & Hecht, 2003.
- 35 Anaa Reese, RD Interview, Alameda County Nutrition Services, Alameda County Department of Public Health. 2003.
- 36 Murphy J. Education for Sustainability: Findings from the Evaluation Study of The Edible Schoolyard, Center for Ecoliteracy. April 2003. Accessed at http://www.ecoliteracy. org/publications/pdf/ESYFindings-Dr/Murphy.pdf on April 6, 2006.
- 37 Sclar E & Northridge ME. "Property Politics, and Public Health." American Journal of Public Health. July 2001; 91 (7):1013-1015.
- 38 Flournoy & Treuhaft, 2005.
- 39 Flournoy & Treuhaft, 2005.
- 40 California Department of Education. Fact Book 2005 Handbook of Education Information, School Facilities. Accessed at http://www.cde.ca.gov/re/pn/fb/yr05scholfacil.asp on April 7, 2006.
- 41 See Fresno Metro Ministry press release, Selma Flea Market Goes High-Tech: Customers can now use Food Stamps to buy fresh produce. Accessed at http://www.fresnometroministry.org/fmm/pdfs/PRESS\_RELEASE\_Selma\_EBT\_12\_04.pdf on April 17, 2006.



## Community Gardens: Martin Luther King, Jr., Middle School Edible Schoolyard

In 1995, celebrity chef Alice Waters conceived an idea that transformed an asphalt lot into The Edible Schoolyard (ESY), a nationally recognized tool for ecological and nutrition learning at the Martin Luther King, Jr. Middle School in Berkeley.

Compared to students in a nearby school, the ESY evaluation found that ESY students had increased knowledge related to ecology, agriculture, and the life cycle of plants.<sup>36</sup> Additional findings showed increased grade point average gains in science and math, improved psychosocial adjustment, and teacher satisfaction.

cooperation between store owners and their customers and communities.<sup>34</sup> Furthermore, if the addition of healthy foods is accompanied by a reduced store emphasis on cigarettes, alcohol, and junk food, the health of the community is enhanced.<sup>35</sup>

 Promote revisions to zoning and land use approval processes to remove barriers to healthy food access. Some zoning codes actually contain provisions that prevent the sale of groceries in neighborhood commercial districts.



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## **Policy Recommendations**

Enhancing the nutrition landscape to serve populations at high risk for obesity and overweight will require changes in state and local land use and economic development policies and practices.

#### I. Land Use Policy

- Sponsor a legislative summit bringing together planners, public health leaders, legislative officials, local leaders, grocery industry representatives, food security experts, and community activists for the purpose of identifying bridges to address healthy food access and California land use.
- Explicitly incorporate public health into CEQA review and General Plan requirements.<sup>37</sup>
- Encourage design elements that address public health/ obesity prevention.

#### 2. Economic Development

- Create financing options that support a comprehensive approach to food access by earmarking state and local resources for grocery store development and other strategies to enhance food access.<sup>38</sup> Financing strategies should include low-interest and deferred payment loans or grants to under-served communities.
- Funding targets should include: infrastructure development and site preparation; generation of more complete and reliable data on the potential buying power of low-income communities; capital and technical assistance costs for upgrading the capacity of corner stores; and support for transportation for patrons of supermarkets and farmers' markets operating in low income communities.<sup>39</sup>

## 3. Support the Development of Sustainable Edible Schoolyards

- Earmark funds for Edible Schoolyards in the current capital construction plans for new schools. The California Department of Education estimates spending \$2.42 billion per year on new school construction.<sup>40</sup>
- Increase support for school gardens through funding for model curricula implementation, equipment and supplies, and in-service training for teachers.

## 4. Support the Expansion of Sustainable Farmers' Markets

• Expand use of public benefits at farmers' markets through increasing use of food stamp Electronic Benefit Transfer cards and the implementation of wireless point-of-sale devices.<sup>41</sup>