

# Preventing childhood obesity: the need to create healthy places

A Cities and Communities Health Report  
October 2007



## Message from the Health Officer

The continuing epidemic of childhood obesity is jeopardizing the future health and well-being of our children. Childhood obesity is both a national and local crisis. Nationally, obesity rates among children have tripled since the late 1970's, and in Los Angeles County, more than 1 in 5 students in the 5th, 7th, and 9th grades are now obese.

There are a multitude of health and economic consequences of obesity in children that continue to mount. Children who are obese are more likely to suffer from low self-esteem and depression, and to develop diabetes and other chronic conditions such as asthma, high blood pressure, high cholesterol, orthopedic problems, liver problems, and breathing problems during sleep. It is estimated that children who are obese have a 70-80% chance of becoming obese adults. As these children begin to develop obesity-related diseases at younger and younger ages, the health and economic consequences, which are only beginning to be felt, will rise exponentially.



Public education and encouragement for individuals and families to adopt healthier lifestyles, while important, will not be enough to solve this crisis. The constellation of environmental factors fueling the childhood obesity epidemic – poverty, our children's food environment, limited access to places for physical activity, and increased time spent in sedentary media oriented activities – must be addressed by an equally comprehensive and concerted effort that involves all sectors of society.

Whether through promoting the availability of fresh produce through neighborhood markets, working together with schools to foster healthy and supportive learning environments for our children, or by designing neighborhoods that provide safe and welcoming places for children to play, cities and communities have a central role to play within this broader effort.

In this report, we present rates of childhood obesity in cities and communities throughout the county and provide rankings so you will know how your area compares with others in the county. We show that rates of obesity are related to social and economic conditions within communities as well as the availability of neighborhood parks. We also provide recommendations on immediate actions cities and communities can take to reduce childhood obesity rates in their neighborhoods.

We hope the information provided in this report will help local communities and cities mobilize efforts and develop new partnerships to improve the health of their residents. Many communities and cities are already taking action, and we hope this report will enhance and support these efforts. Improving health at the community level is by necessity a collaborative process, and we invite you to join us and others in a concerted effort to create healthy, livable cities and communities throughout Los Angeles County.

*Jonathan E. Fielding, MD, MPH*

Director of Public Health and Health Officer





# Study Methods

## Defining Cities and Communities within Los Angeles County

To delineate the geographic areas used in the study, the Census 2000 Incorporated Places and Census Designated Places were used to define boundaries for cities and communities, respectively.<sup>1</sup> Because of its large size, the city of Los Angeles was further broken down into city council districts.<sup>2</sup>

## Estimating the Frequency of Obesity among Youth

The prevalence of childhood obesity was determined using body mass index (BMI) measurements of 5th, 7th, and 9th grade public schoolchildren from the annual California Physical Fitness Testing Program (CaPFTP). Based on the Centers for Disease Control and Prevention (CDC) growth charts,<sup>3</sup> children were considered obese if their BMI exceeded the 95th percentile of their age and gender group's BMI. For this report, data from the 2004-2005 school year provided by the California Department of Education were used, and the location of the public school where the child was in attendance was used to determine the prevalence of obesity for a city or community.

Cities and communities that had fewer than 50 students with BMI data from the CaPFTP were not included in the report. Of the 142 cities and communities in Los Angeles County, there were 128 cities/communities with available BMI data; these were ranked against one another, with 1 indicating the lowest prevalence and 128 indicating the highest prevalence of obese youth.

## The Economic Hardship Index

Social and economic conditions within a community have been shown to have a very powerful influence on health. To examine the relationship between these conditions and rates of childhood obesity in the county, we used a measure called the Economic Hardship Index.<sup>4</sup> The index is scored by combining six indicators:

1. crowded housing (percent occupied housing units with more than one person per room);
2. percent of households living below the federal poverty level;
3. percent of persons over the age of 16 years that are unemployed;
4. percent of persons over the age of 25 years without a high school education;
5. dependency (percent of the population under 18 or over 64 years of age);
6. median income per capita.

Data for these indicators were obtained from the 2000 U.S. Census. The index can range from 1 to 100, with a higher index representing a greater level of economic hardship. The 128 cities/communities were again ranked, with 1 having the least and 128 having the greatest level of economic hardship.

## Quantifying Parks and Open Space

Area available for physical activity is often difficult to define and quantify. In our study, "parks" area was approximated from Rand McNally/Thomas Bros. (2006) digital database, selecting from the following features: parks, beaches, historical parks, open spaces, recreational areas, ecological preserves/estuaries, forests, wilderness areas, and wildlife refuges.

Only park areas located within city or community boundaries were included. For instance, only the portion of the Angeles National Forest within bordering city or community boundaries was designated as park area for that city or community.

To account for the number of people parks serve, park area per capita was used to indicate park acres in each city/community per 1,000 persons. Each city and community was then assigned a rank based on its park area per capita ratio, with 1 having the most and 127 having the least park area per capita.



<sup>1</sup> Source: U.S. Department of Commerce, Census Bureau – 2000 Incorporated Places/Census Designated Places boundary file, [http://www.census.gov/geo/www/cob/pl\\_2000.html](http://www.census.gov/geo/www/cob/pl_2000.html).

<sup>2</sup> More information about the L.A. City Council Districts may be found at <http://www.lacity.org/council.htm>.

<sup>3</sup> For the purposes of this report, childhood obesity was defined as having a gender-specific BMI-for-age at or above the 95th percentile using CDC growth charts. Not all researchers use the same term for this cutoff. The CDC and others refer to this group as being "overweight". We used the term "obesity" to maintain consistency with adult classifications. Details on the growth charts may be found on the Centers for Disease Control and Prevention (National Center for Health Statistics) website: <http://www.cdc.gov/growthcharts/>.

<sup>4</sup> Montiel LM, Nathan RP, Wright DJ. An update on urban hardship.. Albany, NY: The Nelson A. Rockefeller Institute of Government, August 2004.

## Data Analysis

Using these data, we examined whether economic hardship level and park area per capita were associated with the prevalence of childhood obesity within cities and communities using correlation statistics. Two other measures, violent crime and fast food restaurants per capita,<sup>5</sup> were also examined: violent crime was not found to be associated with childhood obesity after accounting for level of economic hardship, and the number of fast food restaurants per capita was not found to be significantly correlated with childhood obesity prevalence; therefore, these measures were not included in this report.

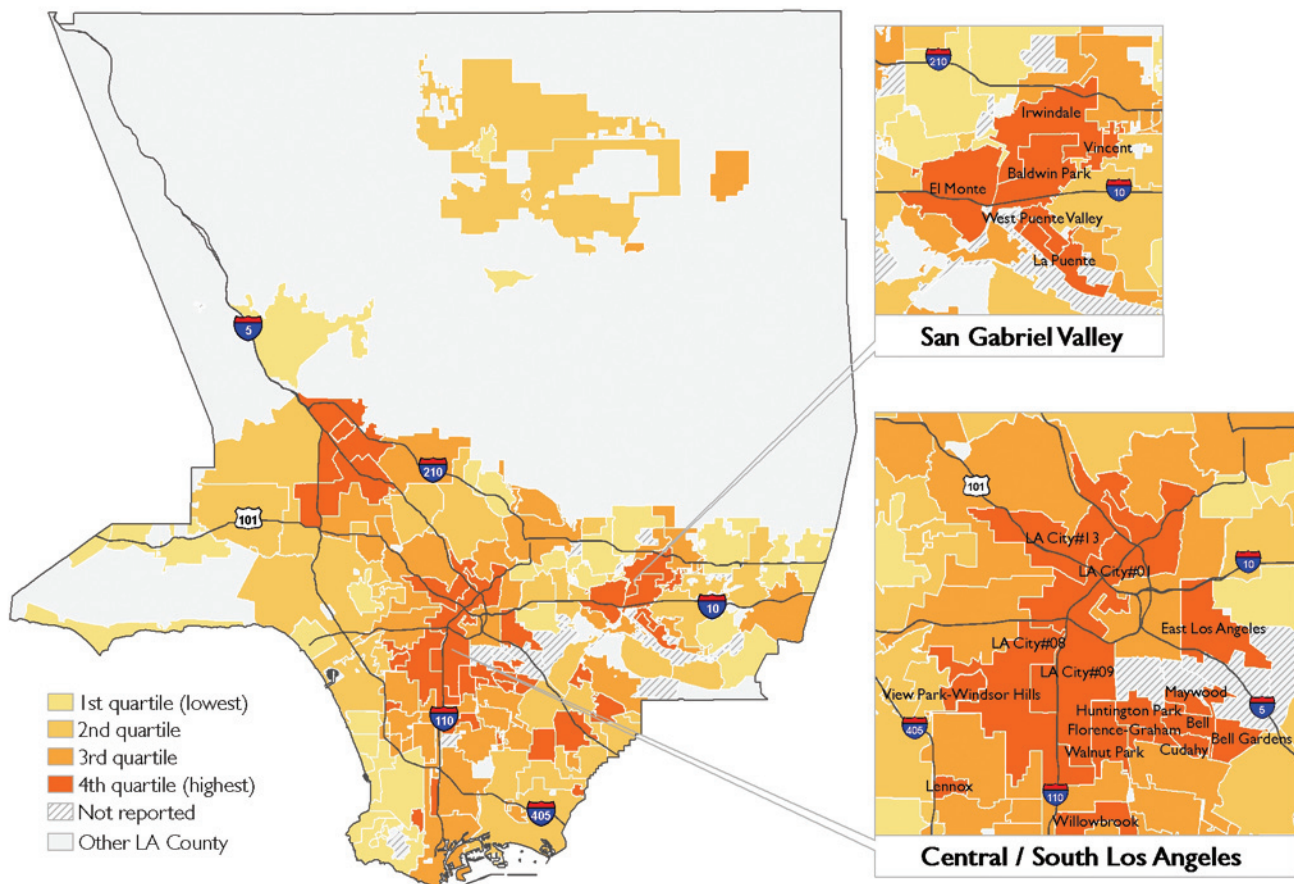
## Findings

The prevalence of childhood obesity for 128 cities and communities in Los Angeles County are presented in Table I and Figure 1. Adjacent to the reported prevalence in the table is the city's/community's ranking (a ranking of 1 being best, or having the lowest prevalence of obesity).<sup>6</sup> Rankings have been divided into four groups (quartiles) and colored by quartile. Table I also shows the Economic Hardship Index, park area per capita, and the associated rankings for each city or community.

The prevalence of childhood obesity varied significantly among cities and communities, from a low of 4% in Manhattan Beach to a high of 37% in Maywood, and was found to be strongly associated with economic hardship. We found a higher prevalence of obesity in cities or communities where the economic burden (higher poverty, lower educational attainment, more dependents, etc.) was greater compared to other cities and communities in the county of Los Angeles.<sup>7</sup>

Park area per capita<sup>8</sup> (Figure 2) was also found to be associated with the prevalence of childhood obesity, though to a lesser degree. Cities with less open area set aside as parks, recreational area, or wilderness area were more likely to have a higher prevalence of children who are obese.

**Figure 1: Prevalence of Childhood Obesity, 2005**



<sup>5</sup> Data drawn respectively from the California Nutrition Network and several law enforcement agencies – California Department of Justice, Los Angeles County Sheriff's Department, City of Los Angeles Police Department.

<sup>6</sup> Note that rankings for smaller cities and communities should be interpreted with caution as they are more subject to variation from small changes

<sup>7</sup> Correlation coefficient = 0.83; p-value < 0.001

<sup>8</sup> Correlation coefficient = -0.47; p-value < 0.001

## Discussion

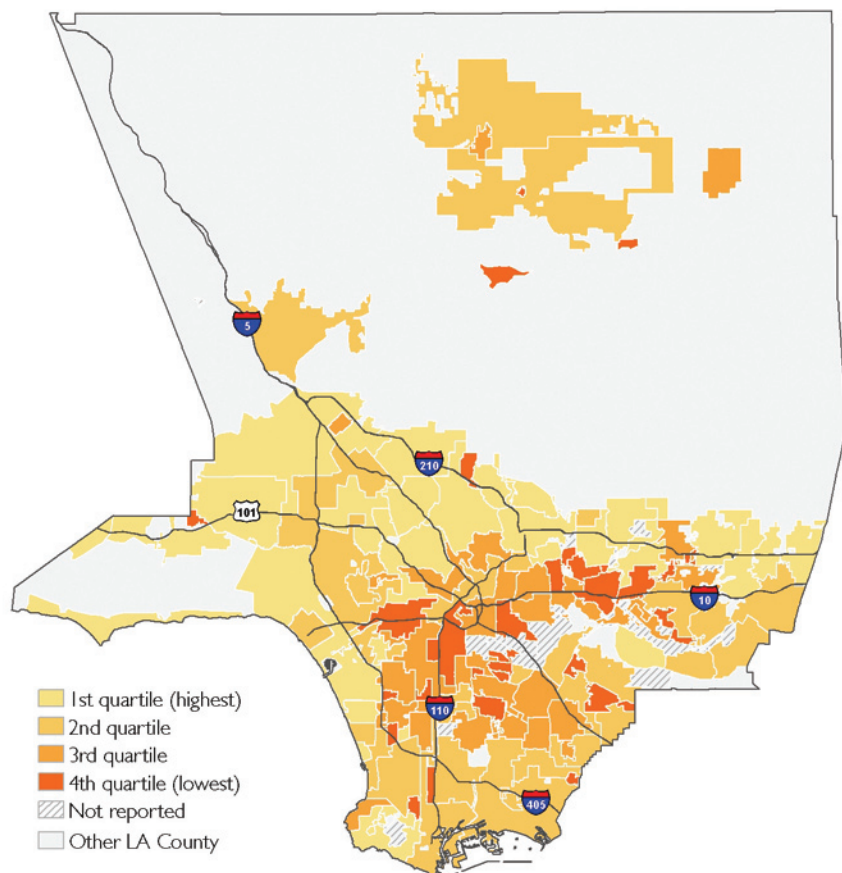
Obesity results when a child takes in more calories from food and beverages than he or she uses up in physical activity and to support normal growth. Though this may seem like a simple and easily correctable imbalance, environmental factors have made it increasingly difficult to achieve that balance and have fueled the epidemic of obese children. The results of this study highlight the important connections between childhood obesity and the physical and social environments in which our children live and play. A child's environment at home, in school, in child care, and within a community can significantly influence a child's risk of becoming obese.

Although the association between low socioeconomic status and increased risk of childhood obesity has been shown in previous studies, the strong correlation found in this study is particularly notable. Previous studies have shown that the environment in which a person lives may affect his or her ability to choose a healthier diet, and that families living in lower income neighborhoods may lack access to healthier food options that are also affordable. In LA County, it is estimated that there are more than four times as many fast-food restaurants and convenience stores as supermarkets and produce vendors.<sup>9</sup> Our food environment has become increasingly important as the percentage of meals families eat from restaurants has increased and portion sizes have grown.<sup>10</sup>

In addition, many children, especially those living in lower income neighborhoods, lack access to safe places to play. Parents living in lower income households are less likely to report their children having a safe place to play such as a park or playground.<sup>11</sup> In the city of Los Angeles, only 30% of residents are estimated to live within a quarter mile of a park.<sup>12</sup> Having access to recreation areas such as parks is associated with increased levels of physical activity, and residential proximity is one of the key factors related to park use.<sup>13</sup> Furthermore, our high-pressured, car and media oriented society has resulted in children who are less active and fit, with fewer of them walking to school, less participation in physical education classes in schools, and more time spent in sedentary media and computer related activities.

The consequences of childhood obesity are serious and continue to multiply. The picture this paints for the future of our children is worrisome: shortened life spans, increased rates of disabling conditions such as diabetes, heart disease, and cancer; reduced quality of life, and enormously high healthcare costs. A concerted effort from all sectors of society is needed to address this epidemic. Fortunately, there is much that cities and communities can do to tip the balance back toward healthier, more active children. In the following section, we list 10 recommendations to effect positive changes in your city or community.

Figure 2: Park Area per Capita, 2006



<sup>9</sup> California Center for Public Health Advocacy. Searching for Healthy Food: The Food Landscape in California Cities and Counties. January 2007.

<sup>10</sup> Pereira MA, Kartashov AI, Ebbeling CB, et al. Fast-food habits, weight gain, and insulin resistance (the CARDIA study): 15-year prospective analysis. *Lancet*. 2005;365:36-42.

<sup>11</sup> Los Angeles County Health Survey, 2005. Unpublished data.

<sup>12</sup> The Trust for Public Land. The Benefits of Parks: Why America Needs More City Parks and Open Space. 2006.

<sup>13</sup> Cohen DA, et al. Contribution of Public Parks to Physical Activity. *Am J Public Health*. 2007;97:509-514.



# Steps toward Healthy Places

## 1. Incorporate health into local planning decisions

Urban design and land use policies impact residents' health and physical activity levels. Creating healthier communities calls for urban planners, architects, engineers, developers, and public health professionals to form new alliances and work together to support new approaches to urban planning – approaches that emphasize making physical activity the easy choice. Cities can create communities that are more walkable and bikeable through zoning regulations and building codes, and by considering design elements such as proximity of residential areas to stores, jobs, schools, and recreation areas; mixed-use developments; continuity of sidewalks and streets; public transportation access; and the aesthetic and safety aspects of the physical environment. Cities can also include language in their City General Plans that relates to public health. For additional information, visit the Local Government Commission website at [www.lgc.org/freepub/land\\_use/factsheets/neighborhood\\_planning.html](http://www.lgc.org/freepub/land_use/factsheets/neighborhood_planning.html).



## 2. Increase access to parks and green spaces

Parks and green spaces provide economic benefits by increasing property tax revenue and attracting businesses, as well as provide health benefits by improving air quality through removal of pollutants, improving water quality and reducing runoff, and lowering air temperatures. Additionally, parks and recreational areas contribute significantly to the social capital of communities by increasing community involvement and providing safe places where residents can gather and children can play. In urban areas, access to parks can be increased through pocket and rooftop parks. One way businesses and other organizations can invest in their communities is through the 'Adopt a Park Sponsorship Program'. Organizations can sponsor a new or existing park, recreation or scholastic program, or beautification or maintenance project. This can significantly improve the quality of life for local residents while making good business sense ([lacountyparks.org](http://lacountyparks.org)).

## 3. Improve public access and safety in recreation areas

Recreation areas are a community resource for the enjoyment of children and adults alike, but safety concerns can be a significant barrier to using these areas for physical activity. Cities and civic organizations can work together to maintain recreation areas for clean, safe usage during daytime and early evening hours by using Crime Prevention Through Environmental Design (CPTED) approaches ([www.cpted-watch.com](http://www.cpted-watch.com)).

## 4. Develop collaborations with schools

Schools are a critical part of children's daily activities, playing an important role in both physical activity and nutrition. Areas where cities can collaborate with schools to create and support healthier learning environments for children include:



- School siting – where a school is located can have significant health and environmental effects. Local governments and school boards have much to gain by working together to site schools where they will support smart growth, promote physical activity and stronger communities, and avoid adverse impacts on neighborhood traffic patterns.
- Joint and community-use agreements – enabling school resources (e.g. fields, recreation areas, and fitness facilities) to be utilized by community members after school hours can provide significant benefit to the surrounding community.
- School Wellness Policies – communities can assist schools in developing health promoting policies that reflect local needs and priorities while meeting federal and state requirements.

## 5. Establish Safe Routes to School

The percentage of children who walk or bike to school has declined significantly over time. One of the most common deterrents is parental concern about safety. Cities can provide safer walking and biking conditions by mapping safe routes to local schools, organizing “walking school buses” and enhancing traffic safety through the use of roundabouts, road narrowing, and pedestrian islands; by providing sidewalks, bike paths, and safe street crossings; and by enforcing school zone speeding penalties. Maps of suggested pedestrian routes to schools are available on the County of Los Angeles Department of Public Works website: [dpw2.co.la.ca.us/website/laco2/](http://dpw2.co.la.ca.us/website/laco2/); information on the Safe Routes to School initiative is available at [www.saferoutesinfo.org](http://www.saferoutesinfo.org).



## 6. Promote menu labeling and the availability of nutrition information to consumers

Cities and communities should work with local restaurants and food retailers to provide nutrition information on their menus so patrons can make better informed choices. Local governments can support legislation requiring nutritional labeling on menus and order boards.

## 7. Increase the availability of healthy foods, including fruits and vegetables

In many communities, especially lower-income areas, fruits, vegetables, and other healthy foods can be difficult to find and expensive, while inexpensive but less healthy foods may be more widely available. Cities can promote the accessibility of healthy foods in these areas through grants, zoning regulations, and other incentives that support the establishment of grocery stores and Farmers' Markets which provide fresh, locally-grown produce. Cities can also use zoning codes and disincentives to discourage a disproportionate surplus of unhealthy foods, especially around schools.



## 8. Promote healthy eating in public facilities

Cities should require and encourage marketing of healthy food and beverage options in vending machines and cafeterias located in government facilities and at public events.

## 9. Publicly recognize civic involvement and leadership

Cities can publicly honor restaurants, businesses, and community groups that offer or support healthy food and physical activity options. City governments need community involvement and participation to help organize and sponsor activities, and community involvement promotes civic pride and awareness. Recognition programs help develop a sense of community and can help motivate human and business resources in the community.

## 10. Healthy choices start with you

You can become a role model in your community by making healthful changes in your own life. Parents play an especially important role in helping their children and families learn healthy eating and physical activity habits that will provide a lifetime of benefits. Parents set powerful examples for their children, and there are many small steps parents can take to promote healthy eating habits and encourage active lifestyles in their family. For great tips from the Department of Health and Human Services on how to eat smart and get moving, visit [www.smallstep.gov/pdf/helpyourchildgrowuphealthyandstrong.pdf](http://www.smallstep.gov/pdf/helpyourchildgrowuphealthyandstrong.pdf).



Table I: Childhood Obesity<sup>†</sup>, Economic Hardship, and Park Area by City and Community, Los Angeles County

| City/Community Name                | Prevalence of Childhood Obesity, 2005 (%) | Rank of 2005 Obesity Prevalence (low to high) | InterCity Economic Hardship Index | Rank of Economic Hardship (low to high) | Park Area per Capita (Acres/1K persons)** | Rank of Park Area per Capita (high to low) |
|------------------------------------|---|---|-----------------------------------|---|---|--|
| <b>Los Angeles County, Overall</b> | <b>23.3</b>                               | --  | --                                | --                                      | --  | --   |
| Acton                              | 15.3 *                                    | 31  | 36.7                              | 31                                      | 0.7                                       | 97   |
| ◆ Agoura Hills                     | 7.3                                       | 7   | 28.6                              | 10                                      | 24.1                                      | 14   |
| ◆ Alhambra                         | 19.0                                      | 42  | 50.9                              | 64                                      | 1.0                                       | 83   |
| Alondra Park                       | 24.5 *                                    | 69  | 57.0                              | 79                                      | 7.2                                       | 27   |
| Altadena                           | 25.5 *                                    | 75  | 41.0                              | 39                                      | 25.6                                      | 13   |
| ◆ Arcadia                          | 12.3                                      | 15  | 37.8                              | 35                                      | 6.9                                       | 28   |
| ◆ Artesia                          | 26.5 *                                    | 80  | 53.4                              | 72                                      | 1.1                                       | 80   |
| ◆ Avalon                           | 23.5 *                                    | 61  | 45.5                              | 55                                      | N/A                                       | N/A  |
| Avocado Heights                    | 27.6 *                                    | 93  | 59.0                              | 83                                      | 1.4                                       | 74   |
| ◆ Azusa                            | 27.4                                      | 88  | 61.0                              | 87                                      | 1.6                                       | 65   |
| ◆ Baldwin Park                     | 28.3                                      | 103   | 71.3                              | 104                                     | 0.5                                       | 110  |
| ◆ Bell                             | 30.2                                      | 115   | 80.1                              | 115                                     | 0.3                                       | 117  |
| ◆ Bell Gardens                     | 28.1 *                                    | 101   | 87.9                              | 125                                     | 1.7                                       | 63   |
| ◆ Bellflower                       | 27.8                                      | 99  | 56.0                              | 78                                      | 0.9                                       | 86   |
| ◆ Beverly Hills                    | 6.9                                       | 4   | 31.3                              | 19                                      | 4.2                                       | 43   |
| ◆ Burbank                          | 17.7                                      | 36  | 41.5                              | 44                                      | 8.9                                       | 24   |
| ◆ Calabasas                        | 8.0                                       | 9   | 26.8                              | 8                                       | 66.7                                      | 8  |
| ◆ Carson                           | 26.0                                      | 79  | 52.0                              | 66                                      | 1.9                                       | 60   |
| ◆ Cerritos                         | 16.8                                      | 33  | 34.3                              | 23                                      | 4.6                                       | 38   |
| Citrus                             | 25.7 *                                    | 76  | 55.4                              | 74                                      | 0.6                                       | 104  |
| ◆ Claremont                        | 12.7                                      | 19  | 38.0                              | 36                                      | 39.2                                      | 10   |
| ◆ Compton                          | 27.7                                      | 94  | 79.6                              | 114                                     | 0.9                                       | 88   |
| ◆ Covina                           | 23.1                                      | 60  | 44.5                              | 50                                      | 1.7                                       | 64   |
| ◆ Cudahy                           | 29.4                                      | 112   | 84.9                              | 123                                     | 0.6                                       | 100  |
| ◆ Culver City                      | 18.5                                      | 40  | 37.1                              | 33                                      | 2.5                                       | 57   |
| Del Aire                           | 18.4 *                                    | 39  | 42.1                              | 45                                      | 1.5                                       | 72   |
| Desert View Highlands              | 20.1                                      | 48  | 53.1                              | 71                                      | 0.0                                       | 122  |
| ◆ Diamond Bar                      | 14.5                                      | 26  | 35.8                              | 27                                      | 5.0                                       | 35   |
| ◆ Downey                           | 22.1                                      | 58  | 51.4                              | 65                                      | 1.0                                       | 82   |
| ◆ Duarte                           | 25.1                                      | 70  | 48.0                              | 62                                      | 90.5                                      | 5  |
| East Compton                       | 29.0                                      | 107   | 89.6                              | 126                                     | 0.7                                       | 94   |
| East La Mirada                     | 21.8                                      | 54  | 41.2                              | 42                                      | 0.0                                       | 122  |
| East Los Angeles                   | 31.9                                      | 121   | 81.6                              | 117                                     | 0.6                                       | 99   |
| East San Gabriel                   | 13.5 *                                    | 22  | 41.2                              | 41                                      | 0.0                                       | 122  |
| ◆ El Monte                         | 28.0                                      | 100   | 75.9                              | 112                                     | 0.5                                       | 108  |
| ◆ El Segundo                       | 12.6                                      | 18  | 29.3                              | 14                                      | 5.7                                       | 31   |
| Florence-Graham                    | 32.0                                      | 122   | 94.6                              | 128                                     | 1.2                                       | 76   |
| ◆ Gardena                          | 27.6                                      | 92  | 52.5                              | 68                                      | 0.9                                       | 85   |
| ◆ Glendale                         | 17.6                                      | 35  | 49.5                              | 63                                      | 21.7                                      | 15   |
| ◆ Glendora                         | 15.6                                      | 32  | 37.5                              | 34                                      | 72.2                                      | 7  |
| Hacienda Heights                   | 20.2                                      | 49  | 42.7                              | 47                                      | 6.5                                       | 30   |

<sup>†</sup>Childhood Obesity is defined as having a gender-specific BMI-for-age ≥ 95th percentile; ◆ Indicates incorporated city;

\* Interpret with caution: estimate is based on a student group size of less than 500; \*\* Park Area per Capita ranked among 127

1st quartile (1st to 32nd) 2nd quartile (33rd to 64th) 3rd quartile (65th to 96th) 4th quartile (97th to 128th\*\*)



| City/Community Name             | Prevalence of Childhood Obesity, 2005 (%) | Rank of 2005 Obesity Prevalence (low to high) | InterCity Economic Hardship Index | Rank of Economic Hardship (low to high) | Park Area per Capita (Acres/IK persons)** | Rank of Park Area per Capita (high to low) |
|---------------------------------|---|---|-----------------------------------|---|---|--|
| ◆ Hawaiian Gardens              | 32.9 *                                    | 124   | 73.1                              | 107                                     | 0.6                                       | 107  |
| ◆ Hawthorne                     | 27.5                                      | 90  | 61.7                              | 89                                      | 0.9                                       | 89   |
| ◆ Hermosa Beach                 | 7.4 *                                     | 8   | 16.6                              | 1                                       | 6.6                                       | 29   |
| ◆ Hidden Hills                  | 9.4 *                                     | 12  | 21.8                              | 3                                       | 0.0                                       | 122  |
| ◆ Huntington Park               | 30.6                                      | 118   | 83.4                              | 122                                     | 0.8                                       | 90   |
| ◆ Inglewood                     | 27.3                                      | 87  | 63.2                              | 91                                      | 1.1                                       | 79   |
| ◆ Irwindale                     | 40.9 *                                    | 128   | 59.1                              | 85                                      | 1427.2                                    | 1  |
| ◆ La Canada Flintridge          | 11.4                                      | 13  | 30.9                              | 18                                      | 9.6                                       | 22   |
| ◆ <b>LA City, All Districts</b> | <b>25.4</b>                               | --  | --                                | --                                      | --  | --   |
| ◆ LA City Council District 01   | 28.2                                      | 102   | 82.8                              | 120                                     | 4.2                                       | 42   |
| ◆ LA City Council District 02   | 24.1                                      | 67  | 47.4                              | 60                                      | 21.7                                      | 16   |
| ◆ LA City Council District 03   | 19.3                                      | 43  | 44.9                              | 53                                      | 7.6                                       | 26   |
| ◆ LA City Council District 04   | 24.3                                      | 68  | 44.7                              | 52                                      | 15.6                                      | 18   |
| ◆ LA City Council District 05   | 18.1                                      | 38  | 31.7                              | 20                                      | 4.1                                       | 44   |
| ◆ LA City Council District 06   | 29.0                                      | 108   | 68.2                              | 99                                      | 4.5                                       | 40   |
| ◆ LA City Council District 07   | 28.8                                      | 106   | 69.5                              | 102                                     | 7.8                                       | 25   |
| ◆ LA City Council District 08   | 29.3                                      | 111   | 73.3                              | 108                                     | 1.5                                       | 69   |
| ◆ LA City Council District 09   | 29.1                                      | 109   | 91.1                              | 127                                     | 0.4                                       | 112  |
| ◆ LA City Council District 10   | 25.9                                      | 78  | 66.2                              | 96                                      | 0.4                                       | 116  |
| ◆ LA City Council District 11   | 20.3                                      | 50  | 33.7                              | 22                                      | 46.5                                      | 9  |
| ◆ LA City Council District 12   | 21.2                                      | 52  | 41.2                              | 43                                      | 12.9                                      | 21   |
| ◆ LA City Council District 13   | 27.8                                      | 98  | 71.5                              | 105                                     | 0.9                                       | 87   |
| ◆ LA City Council District 14   | 26.6                                      | 82  | 68.3                              | 100                                     | 1.4                                       | 73   |
| ◆ LA City Council District 15   | 27.3                                      | 86  | 67.6                              | 98                                      | 3.0                                       | 53   |
| La Crescenta-Montrose           | 12.8                                      | 20  | 34.8                              | 25                                      | 0.4                                       | 115  |
| ◆ La Mirada                     | 19.8                                      | 47  | 40.6                              | 38                                      | 4.3                                       | 41   |
| ◆ La Puente                     | 27.8                                      | 97  | 68.8                              | 101                                     | 0.8                                       | 93   |
| ◆ La Verne                      | 15.3                                      | 30  | 35.9                              | 28                                      | 15.2                                      | 19   |
| Ladera Heights                  | 17.4 *                                    | 34  | 29.0                              | 11                                      | 35.9                                      | 11   |
| Lake Los Angeles                | 25.4 *                                    | 72  | 65.7                              | 93                                      | 1.2                                       | 77   |
| ◆ Lakewood                      | 21.8                                      | 56  | 41.1                              | 40                                      | 2.8                                       | 55   |
| ◆ Lancaster                     | 18.7                                      | 41  | 53.7                              | 73                                      | 5.0                                       | 34   |
| ◆ Lawndale                      | 26.9                                      | 83  | 58.6                              | 82                                      | 0.6                                       | 102  |
| Lennox                          | 31.4 *                                    | 120   | 87.2                              | 124                                     | 0.2                                       | 118  |
| Littlerock                      | 25.4 *                                    | 73  | 61.6                              | 88                                      | 0.0                                       | 122  |
| ◆ Lomita                        | 29.2                                      | 110   | 42.8                              | 48                                      | 0.7                                       | 96   |
| ◆ Long Beach                    | 22.4                                      | 59  | 57.6                              | 80                                      | 3.9                                       | 48   |
| ◆ Lynwood                       | 24.0                                      | 66  | 82.4                              | 119                                     | 0.6                                       | 101  |
| ◆ Malibu                        | 8.9 *                                     | 10  | 22.3                              | 4                                       | 219.9                                     | 2  |
| ◆ Manhattan Beach               | 4.2                                       | 2   | 21.4                              | 2                                       | 5.7                                       | 32   |
| ◆ Maywood                       | 37.4                                      | 125   | 83.3                              | 121                                     | 0.6                                       | 105  |
| ◆ Monrovia                      | 2.8 *                                     | 1   | 46.7                              | 59                                      | 101.6                                     | 3  |
| ◆ Monterey Park                 | 15.0                                      | 28  | 52.4                              | 67                                      | 1.6                                       | 67   |
| North El Monte                  | 21.9 *                                    | 57  | 38.1                              | 37                                      | 0.0                                       | 122  |
| ◆ Norwalk                       | 28.4                                      | 105   | 59.1                              | 84                                      | 1.0                                       | 84   |

1st quartile (1st to 32nd)
  2nd quartile (33rd to 64th)
  3rd quartile (65th to 96th)
  4th quartile (97th to 128th)

| City/Community Name      | Prevalence of Childhood Obesity, 2005 (%) | Rank of 2005 Obesity Prevalence (low to high) | InterCity Economic Hardship Index | Rank of Economic Hardship (low to high) | Park Area per Capita (Acres/IK persons)** | Rank of Park Area per Capita (high to low) |
|--------------------------|---|---|-----------------------------------|---|---|--|
| ◆ Palmdale               | 20.6                                      | 51  | 55.8                              | 76                                      | 4.8                                       | 36   |
| ◆ Palos Verdes Estates   | 6.3                                       | 3   | 23.6                              | 5                                       | 0.8                                       | 91   |
| ◆ Paramount              | 27.4                                      | 89  | 74.0                              | 109                                     | 0.8                                       | 92   |
| ◆ Pasadena               | 23.9                                      | 65  | 45.2                              | 54                                      | 12.9                                      | 20   |
| ◆ Pico Rivera            | 23.7                                      | 63  | 59.9                              | 86                                      | 2.5                                       | 56   |
| ◆ Pomona                 | 27.1                                      | 85  | 67.4                              | 97                                      | 1.8                                       | 61   |
| ◆ Quartz Hill            | 14.4                                      | 24  | 44.6                              | 51                                      | 1.5                                       | 71   |
| ◆ Rancho Palos Verdes    | 11.6                                      | 14  | 29.2                              | 13                                      | 8.9                                       | 23   |
| ◆ Redondo Beach          | 15.2                                      | 29  | 26.6                              | 7                                       | 3.0                                       | 52   |
| ◆ Rolling Hills Estate   | 12.9 *                                    | 21  | 27.4                              | 9                                       | 31.0                                      | 12   |
| ◆ Rosemead               | 21.8                                      | 55  | 66.1                              | 95                                      | 1.3                                       | 75   |
| Rowland Heights          | 19.7                                      | 45  | 43.8                              | 49                                      | 4.6                                       | 39   |
| ◆ San Dimas              | 17.7                                      | 37  | 36.5                              | 30                                      | 100.8                                     | 4  |
| ◆ San Fernando           | 32.9                                      | 123   | 70.6                              | 103                                     | 1.5                                       | 70   |
| ◆ San Gabriel            | 19.7                                      | 46  | 52.9                              | 70                                      | 0.4                                       | 114  |
| ◆ San Marino             | 7.1                                       | 5   | 29.6                              | 15                                      | 18.5                                      | 17   |
| ◆ Santa Clarita          | 13.8                                      | 23  | 36.8                              | 32                                      | 3.3                                       | 50   |
| ◆ Santa Fe Springs       | 23.5                                      | 62  | 55.7                              | 75                                      | 3.6                                       | 49   |
| ◆ Santa Monica           | 14.6                                      | 27  | 32.7                              | 21                                      | 3.1                                       | 51   |
| ◆ Sierra Madre           | 19.4 *                                    | 44  | 26.3                              | 6                                       | 5.6                                       | 33   |
| ◆ Signal Hill            | 25.5 *                                    | 74  | 46.1                              | 57                                      | 4.0                                       | 46   |
| ◆ South El Monte         | 27.6                                      | 91  | 75.7                              | 111                                     | 1.6                                       | 66   |
| ◆ South Gate             | 27.7                                      | 96  | 75.1                              | 110                                     | 1.5                                       | 68   |
| ◆ South Pasadena         | 9.0                                       | 11  | 30.9                              | 17                                      | 2.1                                       | 59   |
| South San Jose Hills     | 27.1                                      | 84  | 72.5                              | 106                                     | 0.5                                       | 111  |
| South Whittier           | 28.3                                      | 104   | 55.9                              | 77                                      | 0.6                                       | 103  |
| ◆ Temple City            | 12.4                                      | 16  | 42.5                              | 46                                      | 0.7                                       | 98   |
| ◆ Torrance               | 12.6                                      | 17  | 35.4                              | 26                                      | 2.5                                       | 58   |
| Valinda                  | 26.6                                      | 81  | 63.6                              | 92                                      | 0.5                                       | 109  |
| View Park-Windsor Hills  | 30.6 *                                    | 117   | 36.2                              | 29                                      | 2.8                                       | 54   |
| Vincent                  | 30.8 *                                    | 119   | 52.8                              | 69                                      | 0.6                                       | 106  |
| ◆ Walnut                 | 14.4                                      | 25  | 34.6                              | 24                                      | 4.0                                       | 45   |
| Walnut Park              | 38.0 *                                    | 126   | 77.0                              | 113                                     | 0.1                                       | 120  |
| West Athens              | 25.8                                      | 77  | 66.1                              | 94                                      | 1.1                                       | 81   |
| West Carson              | 40.5 *                                    | 127   | 46.0                              | 56                                      | 0.0                                       | 121  |
| ◆ West Covina            | 23.7                                      | 64  | 47.5                              | 61                                      | 1.8                                       | 62   |
| ◆ West Hollywood         | 21.4 *                                    | 53  | 29.9                              | 16                                      | 0.7                                       | 95   |
| West Puente Valley       | 30.0                                      | 114   | 62.7                              | 90                                      | 1.2                                       | 78   |
| West Whittier-Los Nietos | 29.7                                      | 113   | 57.8                              | 81                                      | 0.4                                       | 113  |
| ◆ Westlake Village       | 7.1 *                                     | 6   | 29.1                              | 12                                      | 84.5                                      | 6  |
| Westmont                 | 27.7                                      | 95  | 81.9                              | 118                                     | 0.2                                       | 119  |
| ◆ Whittier               | 25.3                                      | 71  | 46.5                              | 58                                      | 4.6                                       | 37   |
| Willowbrook              | 30.5                                      | 116   | 81.2                              | 116                                     | 4.0                                       | 47   |

<sup>†</sup>Childhood Obesity is defined as having a gender-specific BMI-for-age  $\geq$  95th percentile; ◆ Indicates incorporated city;  
\* Interpret with caution: estimate is based on a student group size of less than 500; \*\* Park Area per Capita ranked among 127

 1st quartile (1st to 32nd)    
 2nd quartile (33rd to 64th)    
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## Additional Information on the Web

### **Los Angeles County Department of Public Health, [www.lapublichealth.org](http://www.lapublichealth.org)**

Physical Activity and Cardiovascular Health Program, [www.lapublichealth.org/physact](http://www.lapublichealth.org/physact)

- Establishing policy and programs, research, and community education to reduce the burden of chronic disease.

Nutrition Program, [www.lapublichealth.org/nut](http://www.lapublichealth.org/nut)

- Working to improve the nutrition of LA County residents and promote healthy ways to eat and enjoy food.

### **California Department of Health Services, [www.dhs.ca.gov](http://www.dhs.ca.gov)**

California Center for Physical Activity, [www.caphysicalactivity.org](http://www.caphysicalactivity.org)

- Creating opportunities for everyday activity by connecting partners to resources and helping develop more walkable and bikeable communities.

California Project LEAN, [www.californiaprojectlean.org](http://www.californiaprojectlean.org)

- Working to create healthier communities through policy/environmental changes that affect healthy eating and physical activity

California Nutrition Network Map Viewer, [www.cnnngis.org](http://www.cnnngis.org)

- Allows users to view and query maps of nutrition data such as nutrition and school health programs, grocery stores, parks, demographics, and political districts.

### **US Department of Health and Human Services, [www.hhs.gov](http://www.hhs.gov)**

The HealthierUS initiative, [www.healthierus.gov](http://www.healthierus.gov)

- A national effort to improve people's lives, reduce the costs of disease, and promote community health and wellness.

The Guide to Community Preventive Services, [www.thecommunityguide.org](http://www.thecommunityguide.org)

- Provides decision makers with recommendations regarding population-based interventions to promote health and to prevent disease, injury, disability, and premature death.

CDC, Division of Nutrition and Physical Activity, [www.cdc.gov/nccdphp/dnpa](http://www.cdc.gov/nccdphp/dnpa)

- Guides research, surveillance, training and education, intervention development, health promotion and leadership, policy and environmental change, communication and social marketing, and partnership development.

The Fruits and Veggies — More Matters Health Initiative, [www.fruitsandveggiesmatter.gov](http://www.fruitsandveggiesmatter.gov)

- A national initiative to achieve increased daily consumption of fruits and vegetables, led by the Centers for Disease Control and Prevention (CDC) and Produce for Better Health Foundation (PBH) in partnership with other health organizations.

### **Other Partners**

National Association of County and City Health Officials, [www.naccho.org/topics/HPDP/land\\_use\\_planning.cfm](http://www.naccho.org/topics/HPDP/land_use_planning.cfm)

- Provides information and resources connecting land use planning and public health.

Local Government Commission, [www.lgc.org](http://www.lgc.org)

- Provides inspiration, technical assistance, and networking for local officials and other dedicated community leaders working to create healthy, walkable, and resource-efficient communities.

The Trust for Public Land, [www.tpl.org](http://www.tpl.org)

- Uses conservation financing, research, and education to conserve land for people to enjoy as parks, community gardens, and other natural places.

LA Collaborative for Healthy Active Children, [www.lapublichealth.org/nut/LACOLLAB\\_Files/lacollab.htm](http://www.lapublichealth.org/nut/LACOLLAB_Files/lacollab.htm)

- A collaborative of over 100 stakeholders including school representatives, health care providers, community and faith-based organizations, local government agencies, non-profit organizations, and many others, that was formed to address the epidemic of overweight and unfit children in Los Angeles County.

First5LA, [www.first5la.org](http://www.first5la.org)

- First5LA is dedicated to improving the lives of young children and families throughout Los Angeles County.

The California Endowment, [www.calendow.org](http://www.calendow.org)

- A statewide health foundation which seeks to expand health care access for underserved individuals and communities and improve the health status of all Californians through grant making and policy and advocacy.

Leadership for Healthy Communities, [www.activelivingleadership.org](http://www.activelivingleadership.org)

- A national program of the Robert Wood Johnson Foundation designed to support state and local leaders in creating and promoting policies and programs that promote active living and healthy eating to improve the health, well-being and vitality of communities.



## Los Angeles County Department of Public Health

Jonathan E. Fielding, MD, MPH  
Director and Health Officer

John Schunhoff, PhD  
Chief Deputy

## Division of Chronic Disease and Injury Prevention

Paul Simon, MD, MPH  
Director

## Office of Health Assessment & Epidemiology

Frank Sorvillo, PhD  
Acting Director

Margaret Shih, MD, PhD  
Chief, Epidemiology Unit

## Epidemiology Unit Staff

Aida Angelescu, MS  
Alex Ho, MD, MPH  
David Kwan, MPH  
Mike Jackson, MBA, MPH

## Public Health Communications Office

Tony Taweessup  
Alan Albert

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Michael D. Antonovich, Fifth District

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## Los Angeles County Department of Public Health

313 North Figueroa Street, Room 127  
Los Angeles, CA 90012  
(213) 240-7785