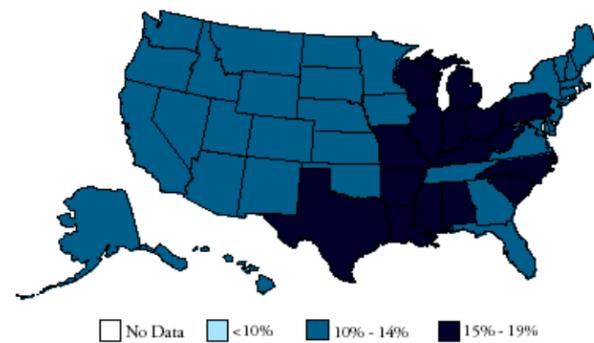


# Community Health and Safety

## INTRODUCTION

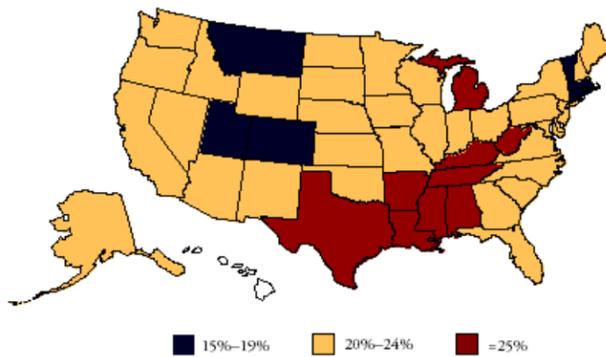
Americans are becoming less and less healthy while they spend more and more on health care. Obesity is becoming a national epidemic, increasing in the majority of states, especially among the young. The links between obesity and high blood pressure and diabetes are well proven. Deteriorating air quality is causing increasing respiratory problems for citizens of many cities.

Map 1  
Adult Obesity Rates, 1994



Source: Center for Disease Control and Prevention

Map 2  
Adult Obesity Rates, 2004



Source: Center for Disease Control and Prevention

Over the past several generations, these health issues have been identified primarily by the public health profession. Research is increasingly showing, however, that the built environment is playing a significant role in public health and demands a response from the field of urban planning.

## IMPLICATIONS OF NOT ADDRESSING THE ISSUE

Land use regulations, specifically zoning codes, are one of the most significant influences shaping the built environment. Single use, low density patterns make it difficult to promote pedestrian activity, cycling and active recreation. The ability to walk to work and shopping, or have convenient and safe access to recreational activities, has become extremely difficult if not impossible in many places. Research shows that individuals who live in areas with more sprawl-like characteristics tend to have higher rates of obesity and higher blood pressure.<sup>1</sup>

Another related issue is pedestrian safety. Building communities designed around automobiles and not pedestrians has resulted in very unsafe environments for walking. Studies have shown that pedestrian fatalities are consistently higher in automobile-oriented areas.<sup>2</sup>

Failing to reform development codes in a way that transforms the built environment to promote healthy lifestyles will result in a continued deterioration of public health, particularly in lower income communities.



## GOALS FOR COMMUNITY HEALTH

To promote healthy communities and active living, community development codes can achieve the following goals:

- Eliminating obstacles by requiring pedestrian and bicycle connectivity between uses and developments and minimizing onerous processes for desirable development (e.g., PUDs, variances, etc.)
- Providing safe and convenient multi-modal transportation options – making walking and bicycling safe and convenient between destinations and reducing vehicle miles traveled
- Ensuring that recreational facilities correspond to population needs. These facilities should also be safe and accessible for pedestrians and bicyclists
- Encouraging the planting of trees that help reduce air pollution

Whether it is design standards for subdivisions, requirements for dedication of park land, or even requiring health impact assessments for development there are a number of zoning code measures available that have been proven effective in a wide range of communities.

## POTENTIAL SUSTAINABILITY MEASURES:

- Commuting patterns - percent driving alone, walking, and bicycling for trips
- Community health indicators - obesity rates in adults and children, body mass index (BMI), and blood pressure
- Pedestrian and bicycle levels of service
- Pedestrian and bicycle accidents and fatalities
- Crime rates in public parks and recreation areas
- Healthy eating options (abundance of fast food restaurants vs. healthy eating restaurants)

<sup>1</sup> LEED ND Core Committee, Understanding the Relationship Between Public Health and the Built Environment, page 84, <https://www.usgbc.org/ShowFile.aspx?DocumentID=1480>.

<sup>2</sup> Howard Frumkin, Urban Sprawl and Public Health, Public Health Report, (May-June 2002).

# Sustainable Community Development Code Framework

## COMMUNITY HEALTH AND SAFETY

### KEY STATISTICS:

- Adult obesity rates rose in 31 states in 2006, with no states showing a decreased rate
- As of 2004, 60 percent of adults and 15 percent of children in America were overweight or obese
- In 1960 America spent 5.1 percent of our gross domestic product on health care. By 2001, that number had nearly tripled to 14.1 percent, representing annual expenditures of \$1.4 trillion.
- Research indicates that areas with sprawl-like characteristics equate to higher rates of obesity, body mass index (BMI), and higher blood pressure for those that live there
- Cities that are more dense and walkable reliably have lower pedestrian fatality rates (e.g., Portland, OR, 1.89 pedestrian deaths per 100,000 population; Tampa, FL, 6.60/100,000)
- A recent study has shown that 46 percent of Americans would walk or bike to work or for errands if they had facilities that were "safe and convenient." Yet only 9 percent of our trips are on foot, and 1 percent on bicycles.



		ACHIEVEMENT LEVELS (NOTE: HIGHER LEVELS GENERALLY INCORPORATE ACTIONS OF LOWER LEVELS)			References/Commentary	Code Examples/Citations
		Bronze (Good)	Silver (Better)	Gold (Best)		
  	<b>Remove Obstacles</b>	<ul style="list-style-type: none"> <li>▪ Provide more by-right mixed-use districts and districts that encourage active living (without a need for a Planned Unit Development process)</li> <li>▪ Reduce off-street parking requirements for Transit Oriented Development (TOD) and mixed-use project</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adopt standards for bicycle facilities (e.g., bike parking) and pedestrian amenities (e.g., connectivity) in commercial areas (offices, retail) to encourage alternative transportation that may currently be difficult and unsafe</li> <li>▪ Provide alternative open space provisions for TODs and mixed use projects such as indoor meeting space, rooftop gardens and plazas</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adopt local street specifications that incorporate "complete streets" principles that encourage walking and biking (See Complete Streets Code Section)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Federal Highway Administration. <i>Design Guidance Accommodating Bicycle and Pedestrian Travel: A Recommended Approach</i>. <a href="#">Available online</a>. Retrieved November 2, 2010.</li> <li>▪ Complete the Streets (a national coalition). <i>How to Get Complete Streets</i>. <a href="#">Available online</a>. Retrieved November 2, 2010.</li> <li>▪ Frumkin, Howard, et al. <i>Urban Sprawl and Public Health: Designing, Planning, and Building for Healthy Communities</i> (2004).</li> </ul>	<ul style="list-style-type: none"> <li>▪ Williams, Kristine M. and Seggeman Karen E. National Center for Transit Research. <i>Model Regulations and Plan Amendments for Multimodal Transportation Districts</i>. <a href="#">Available online</a>. Retrieved November 2, 2010.</li> <li>▪ City of Cambridge, MA, <i>Zoning Ordinance Article 6 Off Street Parking &amp; Loading Requirements</i> (Note: standards designed to promote cycling, transit and walking), <a href="#">Available online</a>. Retrieved November 2, 2010.</li> <li>▪ Davidson, NC. <i>Planning Ordinance Section 10 Parking</i> (Note: regulations designed to minimize breaks in the pedestrian environment), <a href="#">Available online</a>. Retrieved November 2, 2010.</li> </ul>

## Sustainable Community Development Code Framework

### COMMUNITY HEALTH AND SAFETY

	Bronze (Good)	Silver (Better)	Gold (Best)	References/Commentary	Code Examples/Citations
<b>Create Incentives</b>	<ul style="list-style-type: none"> <li>▪ Provide expedited review when community health objectives are met (e.g., pedestrian orientation and connectivity)</li> <li>▪ Provide landscape credit for tree preservation (see Climate Change and Solar Energy Code Sections)</li> <li>▪ Offer density bonuses for mixed-use and compact developments</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduce parking requirements for developments that provide connectivity, walkability, bicycle facilities</li> <li>▪ Offer open space credit for improved recreational facilities such as recreation centers, tennis courts and paved trails</li> <li>▪ Provide open space credit or bonuses for preserving access to public lands or allowing public access or use of on-site trails</li> </ul>	<ul style="list-style-type: none"> <li>▪ Offer credit towards meeting commercial and residential design standards when community health objectives are met (e.g., shower facilities in office buildings)</li> </ul>	<ul style="list-style-type: none"> <li>▪ American Planning Association. <i>Advisory Service Report Number 543/544: Local and State Examples of Planning and Designing Active Communities.</i></li> <li>▪ American Planning Association. <i>Advisory Service Report Number 539/540: Integrating Planning and Public Health: Tools and Strategies to Create Healthy Places.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ City of Austin, Texas, <i>Development Code, Subchapter E: Design Standards and Mixed-Use</i>, <a href="#">Available online</a>. Retrieved November 2, 2010.</li> </ul>
<b>Enact Standards</b>	<ul style="list-style-type: none"> <li>▪ Require or encourage parks or open space dedication or set aside with clear definitions of what qualifies (e.g., a trail rather than a detention pond)</li> <li>▪ Establish parkland dedication fees for city park fund</li> <li>▪ Require sidewalks through parking lots</li> <li>▪ Require sidewalks on both sides of streets in urban and suburban areas (See Complete Streets Code Section)</li> <li>▪ Limit waivers to sidewalk installation</li> <li>▪ Require pedestrian connections between adjacent developments and nearby public facilities such as schools</li> <li>▪ Enact standards to provide shade for pedestrians in hot climates; protect against ice and snow on sidewalks in northern climates</li> <li>▪ Limit parking in front of commercial buildings to enhance pedestrian experience</li> <li>▪ Require trees between street and sidewalk</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduce parking requirements (especially for mixed-use and transit-oriented developments) and specify the maximum number of parking spaces allowed (e.g., 125% of minimum)</li> <li>▪ Require or encourage non-residential building amenities such as bike parking, convenient and visible stairs, and lockers and showers for those biking or walking to work (See Bicycle Mobility Code Section)</li> <li>▪ Require connectivity measures in subdivisions (e.g., restrict block lengths; prohibit cul-de-sacs unless pedestrian access provided through dead end)</li> <li>▪ Require health department review in the referral process for larger developments</li> <li>▪ Establish safe school routes and require compliance in review process</li> <li>▪ Require maintenance of existing access to public lands</li> </ul>	<ul style="list-style-type: none"> <li>▪ Require non-residential development to meet pedestrian and bicycle levels of service (LOS) standards</li> <li>▪ Adopt Crime Prevention Through Environmental Design (CPTED) principles into development standards</li> <li>▪ Require health impact assessments for larger developments</li> <li>▪ Prohibit or limit the number of formula (typically fast food) restaurants, especially near schools and in lower income neighborhoods</li> <li>▪ Require mandatory use mix in TOD, PUD, and mixed use projects</li> </ul>	<ul style="list-style-type: none"> <li>▪ American Planning Association. <i>Advisory Service Report Number 543/544: Local and State Examples of Planning and Designing Active Communities.</i></li> <li>▪ Zelinka, AI, et al. (2001). <i>Safescape: Creating Safer, More Livable Communities Through Planning Design.</i></li> <li>▪ U.S. Green Building Council. <i>LEED for Neighborhood Rating System</i> (See Smart Location and Linkage and Neighborhood Pattern and Design chapters). <a href="#">Available online</a>. Retrieved November 2, 2010.</li> <li>▪ U.S. Dept. of Transportation, Federal Highway Administration. <i>National Safe Routes to School Program</i>. <a href="#">Available online</a>. Retrieved November 2, 2010.</li> <li>▪ Tri-County Health, Ingham County, MI, Health Impact Assessment tools. <a href="#">Available online</a>. Retrieved November 2, 2010.</li> </ul>	<ul style="list-style-type: none"> <li>▪ San Diego Regional Planning Agency (SANDAG), <i>Planning and Designing for Pedestrians, Model Guidelines for the San Diego Region</i>, <a href="#">Available online</a>. Retrieved November 2, 2010.</li> <li>▪ City of Franklin, TN, <i>Zoning Ordinance, Sections 5.5 and 5.10.4: Parkland dedication requirements and connectivity index for subdivisions</i>, <a href="#">Available online</a>. Retrieved November 2, 2010.</li> <li>▪ City of Arcata, CA, <i>Amendment to Municipal Code Title IX To Limit Formula Restaurants</i>, <a href="#">Available online</a>. Retrieved November 2, 2010.</li> <li>▪ City of Fort Collins, CO, <i>Land Use Code, Section 3.5.4 Large Retail Establishment Design Standards</i> (See parking and pedestrian amenities), <a href="#">Available online</a>. Retrieved November 2, 2010.</li> <li>▪ SmartCode Central. <i>Smart Code Version 9.2, Mixed Use Zoning (Transect) Districts</i>. <a href="#">Available online</a>. Retrieved November 2, 2010.</li> </ul>