

Chapter 8

Planning and the Built Environment: Implications for Obesity Prevention

Susan Handy and Kelly Clifton

Introduction

The built environment – the physical form of our communities – plays an important role in the obesity epidemic (Frank et al. 2003; Institute of Medicine 2005). An understanding of the built environment and ways of influencing it has, therefore, become essential for any one interested in furthering environments conducive to obesity prevention. The built environment consists of two essential elements: land use patterns, the location of activities across space; and the transportation system, the facilities and services that link one location to another. These elements together determine access to opportunities for physical activity and healthy eating. Access to opportunities, in turn, influences physical activity and nutrition behavior, with implications for obesity. It is increasingly clear that the built environment that predominates in most U.S. cities provides limited opportunities for physical activity and easy access to less healthful food choices, and it is increasingly clear that this situation is contributing to caloric imbalances for many. Indeed, recent studies show a link between suburban sprawl and obesity (Ewing et al. 2003; Lopez 2004), between mix of land uses and obesity (Frank et al. 2004), between access to fast food outlets and obesity (Maddock 2004), and between overweight and absence of community infrastructure for both physical activity and healthy eating (Catlin et al. 2003). In the socio-ecological model of behavior (described in Chapter 13), widely applied in the health community, the built environment is a part of the community level of influence on health (McLeroy et al. 1988; Sallis et al. 2006).

The goal of this chapter is to provide readers with a brief introduction to land use and transportation planning. Although traditional approaches to planning have contributed to the obesity problem, perhaps to the greatest degree in low-income areas, new approaches in both domains open up important opportunities for obesity prevention. Several larger efforts that integrate transportation and land use planning with both planning and public health perspectives offer substantial promise for obesity prevention efforts. The chapter ends with an overview of the ways in which a concern for obesity prevention can be inserted into these planning processes.

Rationale

If the built environment contributes to obesity, then reshaping the built environment is potentially an important intervention in efforts to prevent obesity. The built environment is shaped through the land use planning and the transportation planning processes. In very broad terms, land use planning helps determine the location, intensity and type of development in an urban area. The transportation planning process influences the provision of infrastructure and services that link these urban activities. Together, these two planning domains can act to create communities that support physical activity by increasing access to places where physical activity occurs such as parks, green space, trails and recreation centers, or by providing the opportunity for active travel, such as walking and bicycling, as well as public transit services that are accessed by these non-motorized modes. Urban planning may also impact health outcomes by influencing the nature of access to food resources (James et al. 1997; Sharpe 1999). If obesity concerns are incorporated into land use and transportation planning processes, the outcome can be an environment that fosters healthful eating and physical activity behaviors and supports lifestyle choices conducive to obesity prevention.

Although one affects the other, land use and transportation planning processes as they are structured in the United States are largely separate, with different agencies responsible for each and with power concentrated at different levels of government. The coordination of land use and transportation planning has been hampered by the “bottom up” and “top down” approaches of the respective domains. Local governments and private developers are primarily responsible for land use planning decisions; the role of the federal government tends to be limited to regulations focused on environmental protection; and states fall somewhere in between, exerting their influence in the areas of growth management, environmental regulation and conservation, and regulation of the planning process. Conversely, the transportation planning agenda and processes are set largely by the federal government through requirements tied to federal transportation funding, but with much responsibility for specific decisions delegated to state and regional agencies. Recent efforts to improve coordination between land use and transportation planning are helping to overcome this separation and are also improving the outlook for creating healthy environments.

Local Land Use Planning

How it Works and Who Does What

In the United States, the power to regulate land use resides with state governments and derives from the more general power of a government entity to “restrict private activity in order to achieve a broad public benefit” (Fulton 1999). Most states have delegated this power to local governments – cities, counties, and, in some states, townships or other local entities. As a condition of applying this power, however, most states also impose certain requirements on local governments with respect to land use planning. The requirements vary from state to state, with some states retaining more of a role in land use planning than others. In most places, decisions about land use are made at the local