

Planning and Land Use Solutions to Create Active, Healthy Counties



Collaboration for Health Promotion and Obesity Prevention

Issue Brief #2

November 2008

This is the second in a series of issue briefs the National Association of Counties (NACo) is publishing in an effort to engage county officials and key department staff around the issue of health promotion and obesity prevention. To view other issues in the series, or for additional resources from the National Association of Counties on how to build healthy communities, visit www.healthycounties.org.

Today, obesity is one of the most urgent health concerns in the United States. Nearly one-third of children and teens and more than two-thirds of adults are overweight or obese, totalling nearly 160 million Americans.¹ Considering the long-term health consequences associated with obesity, the scope of the epidemic has billion-dollar implications for health care expenses.²

Many factors contribute to obesity, and the community environment in particular can have a strong influence on children and families' access to healthy foods and opportunities for regular physical activity. Decisions made at the local level regarding zoning, planning, transportation, health, housing and development, and other important community issues can

have a significant impact on residents' health. By recognizing these links, and by consciously making policy and practice decisions aimed to improve residents' health, counties can help reverse obesity trends and build vibrant communities.

County Planners and Land Use Officials as Partners in Health Promotion and Obesity Prevention

In response to increases in childhood and adult obesity rates, counties have begun developing initiatives to improve community health. These efforts are most successful when they involve a broad coalition of partners. County planners and land use leaders, along with other county officials and stakeholders from schools, community organizations, parent groups, faith-based organizations and the private sector, can all be key partners in building healthier communities. Broad coalitions bring a wide range of resources to the table and provide a variety of access points to reach residents and improve their health.

The health promotion and obesity prevention strategies suggested in this publication can help improve the health and quality of life for all county residents, and were developed to have the greatest impact on children and teens.

What Can County Planning and Land Use Officials Do?

County planners and land use officials can partner in health promotion and obesity prevention efforts by designing built environments that provide opportunities for regular physical activity and access to nutritious foods. This brief outlines four strategies that counties can implement:

- Utilize neighborhood-scale development;
- Zone for health-promoting development;
- Preserve prime agricultural land; and
- Include health leaders in planning discussions.

The ability of counties to adopt these strategies will vary depending upon jurisdiction, population size, access to resources and other factors.

Designing Healthy, Active Communities

Utilize Neighborhood-Scale Development: Think Small, Mixed and Well-connected

Adequate physical activity is an important component in health promotion and obesity prevention. Unfortunately, less than one-third of children and less than half of adults achieve the recommended 60 minutes of moderate-to-vigorous physical activity per day.⁸ Neighborhood

Why Should We Act to Prevent Chronic Disease and Obesity?

In the last 40 years obesity rates have soared for all age groups, but at an especially fast pace among the youngest age groups, increasing more than four times among children ages 6 to 11.^{3,4} As a result, today's children are at higher risk for a host of serious illnesses including type 2 diabetes, heart disease, hypertension, asthma, and certain types of cancer. Some experts predict that unless the childhood obesity epidemic is reversed, the current generation of children may be the first in U.S. history to live sicker and die younger than their parent's generation.⁵

In addition to the medical and social consequences, the financial consequences of the obesity epidemic are also significant. Today, more than 75 percent of America's healthcare expenditures are for chronic conditions—many related to obesity.⁶ According to the U.S. Centers for Disease Control and Prevention (CDC), the annual cost of obesity in the United States is estimated at \$117 billion. Approximately \$61 billion is spent on direct medical costs and \$56 billion on indirect costs such as lost productivity.⁷ These costs are felt by individual taxpayers, local governments and employers.



Making the Most Out of What They Have: Protecting Rural Areas and Maximizing Urban Centers

Albemarle County, Virginia

Albemarle County's Comprehensive Plan outlines a clear vision for protecting the rural areas Albemarle residents value so dearly, and for developing high-quality urban areas that will accommodate the majority of future anticipated growth. While less than 5 percent of the county's land area is urban, Albemarle County accommodates growth and preserves valuable rural land by maximizing high-density, mixed-use development in designated areas.

For Albemarle's growth management strategies to work, designated urban areas must be attractive, convenient, vibrant places for people to live and work. The county's major tool for creating such

livable communities is the Neighborhood Model. The Neighborhood Model promotes areas that accommodate walkers, bikers and public transportation; integrate open spaces; mix residential and non-residential uses; connect streets and pathways; mix housing types and affordability levels; keep buildings and spaces at a human scale; adapt and reuse sites rather than abandoning them; and have distinct boundaries from rural areas. The Neighborhood Model also stresses the role of master planning and community engagement to guide growth in designated development areas.

Contact:

Elaine K. Echols
Principal Planner
434.296.5823 x 3252
eechols@albemarle.org
<http://www.albemarle.org/department.asp?department=planning&relpage=2480>

design can contribute to greater car use and less physical activity. In addition, a significant body of research has found that certain aspects of community design can increase rates of physical activity by incorporating active living into daily routines of both children and adults.⁹

Community features that promote physical activity include: parks and playgrounds located within easy access of residential areas; aesthetically pleasing outdoor community spaces; compact neighborhood development that facilitates walking and biking; grid street networks; and sidewalks and trails that connect families to lifestyle centers, schools, grocery stores and other popular destinations.¹⁰ Incorporating these elements into community design is often referred to as "neighborhood-scale development."

A variety of strategies available to local governments implement neighborhood-scale development, and counties can choose those that best fit their needs.

For example, rural and suburban counties experiencing high population growth may want to work with developers to ensure that future neighborhoods include parks and playgrounds and are connected to nearby destinations via sidewalks and

trail systems. Meanwhile, urban counties may want to work with developers on infill development and revitalization projects. Counties that possess zoning authority can establish growth boundaries and set aside land for recreational use. Counties can also review their codes and ordinances to ensure that they allow for infrastruc-

Creating an Activity Hub, Connecting a Community

Wake County, North Carolina

In response to anticipated growth in unincorporated areas, Wake County designated neighborhood and community "activity centers" in their Land Use Plan in 1999 to encourage high density, mixed land use development. The activity centers are intended to be focal community gathering points, connecting to neighborhoods via trail networks and fostering shorter commutes. With the exception of the Watersupply Watershed areas, Wake County anticipates that these areas will be annexed by local municipalities in the near future, and is working with these partner governments to develop specific policies and profiles within the activity centers appropriate for each of the different regions in the county.

ture that supports walkable communities. Other tools counties can use to achieve neighborhood-scale development are form-based codes, mixed-use zoning, and transit-oriented development.

Resources

- *Local Government Commission Fact Sheet: Neighborhood-Scale Planning Tools*
- *Massachusetts Smart Energy Toolkit: Traditional Neighborhood Development*
- *American Planning Association Smart Growth Reader*
- *Smart Growth Network*

Exercise Zoning Authority to Increase Access to Nutritious Foods and Physical Activity

Zoning authority is perhaps one of the strongest powers local governments possess. States maintain regulatory authority over many zoning matters, and most states have delegated these powers to local governments.¹¹ Depending on state law, counties' zoning authority varies. Some have complete authority, some share authority with other local governments, and some have none.

Counties that possess full or limited zoning authority can protect community health by amending zoning codes and or-

Though unique, the activity center guidelines all encourage mixed-use community centers by allowing for the full blend of goods and services that people need to live healthy and vibrant lifestyles. Allowed uses include grocery stores, recreational space, and retail and commercial development. In order to work with property owners and community leaders in developing these new community hubs, Wake County identified specific parcels of land that are able to support activity center uses.

Contact:

Melanie Wilson
Director of Planning
919.856.6315
melanie.wilson@co.wake.nc.us
www.wakegov.com/planning/landuse/wake_county_lup.htm

dinances to promote public health principles. According to leading health experts, the built environment has a direct effect on health.¹² Built environments that provide children and families with access to nutritious foods and opportunities for physical fitness are associated with lower risk for obesity.^{13,14}

Communities that include grocery stores, farmers markets and community gardens are more likely to be able to provide residents with nutritious foods at affordable prices. Communities that include parks, playgrounds, recreation centers, and bike-ways and trails provide residents' with greater opportunities for physical activity. Greater access to these community amenities is valuable for all residents and particularly relevant for those living in underserved neighborhoods.

Counties can pursue a number of zoning strategies in order to increase healthy eating and physical activity. They can ensure that codes and ordinances require developers to consider the health impacts of new proposals; create financial incentives for developers to incorporate features of active living into new developments; create a parks and trails plan; and designate space to promote the local food economy, including community gardens, Community Supported Agriculture (CSAs), farmers' markets, and grocery stores.

Resources

- *Centers for Disease Control and Prevention, Designing Healthy Communities and Places Website*
- *Active Living by Design*
- *Public Health Law and Policy Report on Healthy General Plans*
- *Overcoming Obstacles to Smart Growth through Code Reform*

Preserve Prime Agricultural Land

Although fresh fruits and vegetables are all an important component of a healthy diet, almost 80 percent of children and 77 percent of adults do not consume the recommended five or more servings of fruits and vegetables per day.¹⁵

Recent research has shown that children and families' food environment—the stores, restaurants, and other locations where they access food—affects

Protecting Farmland to Ensure Local Access to Fresh Produce Macomb County, Michigan

Over the past two decades, Macomb County has experienced a significant growth in population, spurring a rise in development that compromised productive farmland. To address this issue, in 2000 the Macomb County Board of Commissioners formed a Farmland and Open Space Preservation Ad Hoc Committee charged with developing policy recommendations for quality growth. The committee worked with Michigan State University (MSU) and the Macomb County Department of Planning and Economic Development to develop the recommendations, which were approved by the Board in 2001. The County then worked with farmers, municipalities, MSU and community members to form the Macomb Agricultural Purchase of Development Rights Committee (MAPDRC) in order to become eligible for a grant for farmland preservation that

the amount of fruits and vegetables they eat.¹⁶ Furthermore, lack of venues where children and families can purchase fresh produce is associated with risk for obesity.¹⁷

Increases in demand for locally grown foods over the past years have had a positive effect on community food environments. Between 1996 and 2006, the number of operating farmers' markets in America nearly doubled.¹⁸ Local food retail, farm-to-school programs, and community gardens also flourished creating new access points for children and families to obtain fruits and vegetables.

Testimonials suggest that individuals—especially children—who have access to locally grown foods consume more fruits and vegetables than those who do not.¹⁹ Children may be more willing to eat locally grown produce when it is available because they enjoy the fresh taste and are proud that it comes from their community. Schools and community groups are also more likely to make an effort to promote locally grown foods to children.²⁰

Expanding access to locally grown food is one way counties can make it easier for

would soon be offered by the state of Michigan.

When the grant was announced, the Macomb County Department of Planning and Economic Development and MSU helped craft the application. Matching funds were provided by the Carls Foundation and the Macomb Farm Bureau. In 2006, MAPDRC was awarded \$278,000 by the Michigan Agricultural Preserve Fund Board. Shortly after, Macomb County permanently preserved its first farm—nearly 40 acres of prime land.

Contact:

John Crumm
Program Manager for Planning & Environmental Services
586.469.5285

john.crumm@macombcountymi.gov
www.macombcountymi.gov/mcped/Project_Programs/PE/Growth%20Management%20and%20Resource%20Conservation.html

children and families to include fruits and vegetables in their daily diet. County planning officials can play an important role in connecting children and families with locally grown food by protecting prime agricultural land. Currently, American farmland is disappearing at a rate of two acres per minute,²¹ and there is a need to preserve agricultural land in order to sustain vibrant local food systems.

Counties can preserve farmland by zoning for agricultural use; establishing an agricultural conservation easement program that includes right-to-farm provisions; establishing growth boundaries and designated development areas; and creating tax disincentives to develop agricultural land, or tax incentives to grow fresh fruits and vegetables. Counties can also ensure that agriculture is profitable for local farmers by making one or more sites available (perhaps at no cost) to farmers so they can sell local food products. Counties can help farmers work with local grocery stores to sell local produce, and encourage the purchase of local foods in schools, hospitals and to meet other county food product needs

Resources

- *APA Policy Guide on Agricultural Preservation*
- *Counties and Local Food Systems*
- *Healthy Eating by Design*
- *American Farmland Trust*

Include Health Leaders in Planning Discussions

Decisions about planning, community design and transportation planning have a direct impact on the incidence of chronic diseases including obesity, heart disease and diabetes.²² Even though planning and development decisions are intricately linked to children and families' ability to live healthy lifestyles, it is relatively uncommon for county planning leaders to collaborate with health leaders as they plan for community design.

As researchers continue to highlight the connections between community design and chronic disease, some local governments are taking steps to integrate health officials into the planning process. By collaborating with public health officials, planners and other county planning leaders can work to identify potential positive or negative health impacts of proposed designs. Together they can plan for communities that promote physical activity and healthy eating.

There are many ways that counties collaborate with health officials. For example, they can invite public health representatives to participate in discussions about comprehensive plans, regional transportation plans, zoning codes and ordinances. In addition, counties can conduct a Health Impact Assessment of policies or plans that may affect community health,

and pass policies that require community design to address effects on public health, particularly chronic diseases such as obesity, diabetes and cardiovascular disease. Including recreation officials and school administrators can help ensure that community and transportation planning officials consider how open space, parks, sidewalks, and public facilities increase opportunities for physical activity.

Resources

- *APA Healthy Communities through Collaboration Project Website*
- *National Association of City and County Health Officials' Land Use Planning Website*
- *Creating Safe, Healthy and Active Living Communities*
- *Smart Growth America's Health*
- *Tri-County Health Department in Colorado Does More Than Just Review a Development Plan*
- *Design for Health*

Making a Plan for Community Health and Wellness

*Tri-County Health Department
Adams, Arapahoe and Douglas
Counties, Colorado*

For the past several decades, the Tri-County Health Department (TCHD) Land Use Program has reviewed and offered comments on local planning and development proposals. Several years ago they expanded the scope of this program to address factors within the built environment that affect chronic disease and obesity rates, in addition to environmental health factors.

The goal of TCHD's Land Use Program is to routinely include public health principles in local planning and development activities. The first step involved establishing a constructive working relationship with the local planning departments in each of the jurisdictions served by TCHD. By building these relationships, TCHD has been able to establish itself as an essential partner in the overall community planning process. TCHD offers specific public health recommendations on as many as 300 land-use referrals per year, and are regularly involved with several planning departments from project conception through project approval. Based on the project under con-

sideration, they work with developers, city and county policy-makers, community groups, and transportation officials. TCHD also participates in updating the Comprehensive Land Use Plans to include public health considerations.

TCHD's accomplishments include working with planners and developers to increase sidewalk and bicycle systems; improving pedestrian and transit connections to schools and resources in new and adjacent developments; conducting a Health Impact Assessment on a neighborhood Master Plan to promote access to healthy food and increased physical activity; and including a bicycle and pedestrian plan into one jurisdiction's comprehensive plan. These changes have contributed to a more walkable community, offering residents convenient and accessible outlets for physical activity and access to healthy foods.

Contact:

Carol MacLennan
Senior Environmental Health Policy
Coordinator
Tri-County Health Department
303.846.6232
<http://tcbd.org/land.htm>
cmacLenn@tcbd.org

Get started now!

1. Appoint public health, parks and recreation, and school officials to planning commissions and transportation boards.
2. Conduct walking audits to identify needed pedestrian, infrastructure and public safety improvements.
3. Educate your constituents on the benefits of walkable communities.
4. Update zoning codes to support transit oriented development.
5. Attend county planning department meetings regularly.
6. Encourage the addition of a separate section on health in your next comprehensive plan.
7. Encourage the purchase of local produce in schools, hospitals and county facilities.

References

- ¹ Ogden CL, Carroll MD, Flegal KM. "High Body Mass Index for Age Among US Children and Adolescents, 2003-2006." *Journal of the American Medical Association*, 299(20):2401-2405, May 2008.
- ² *Childhood Obesity: Costs, Treatment Patterns, Disparities in Care, and Prevalent Medical Conditions*. Thomson Medstat Research Brief, 2006. www.medstat.com/pdfs/childhood_obesity.pdf.
- ³ Ogden CL, Carroll MD, Curtin LR, et al. "Prevalence of Overweight and Obesity in the United States, 1999-2004." *Journal of the American Medical Association*, 295(13):1549-1555, 2006.
- ⁴ Ogden CL, Flegal KM, Carroll MD, et al. "Prevalence and Trends in Overweight Among US Children and Adolescents, 1999-2000." *Journal of the American Medical Association*, 288(14):1728-1732, 2002.
- ⁵ Olshansky SJ, Passaro DJ, Hershow RC, et al. "A Potential Decline in Life Expectancy in the United States in the 21st Century." *New England Journal of Medicine*, 352(11):1138-1145, 2005.
- ⁶ *Chronic Disease Overview*. Centers for Disease Control and Prevention. 2008. www.cdc.gov/nccdphp/overview.htm.
- ⁷ *Preventing Obesity and Chronic Diseases Through Good Nutrition and Physical Activity*. Centers for Disease Control and Prevention, 2005. www.cdc.gov/nccdphp/publications/factsheets/Prevention/obesity.htm.
- ⁸ "Youth Online: Comprehensive Results." National Center for Chronic Disease Prevention and Health Promotion. 2008. <http://apps.nccd.cdc.gov/yrbss/SelectLocyear.asp?cat=6&Quest=Q80>.
- ⁹ "The built environment and physical activity: What is the relationship?" Robert Wood Johnson Foundation. 2007. www.rwjf.org/pr/synthesis/reports_and_briefs/pdf/no11_researchreport.pdf.
- ¹⁰ See note 2.
- ¹¹ Schilling J, Linton, L. "The Public Health Roots of Zoning." *American Journal of Preventative Medicine*. 2005: 28.
- ¹² Cummins SK, Jackson RJ. "The Built Environment and Children's Health" pg. 3. Available at: www.cdc.gov/healthyplaces/articles/The%20Built%20Environment%20and%20Children%20Health.pdf.
- ¹³ Davison KK, Lawson CT. Do attributes in the physical environment influence children's physical activity? A review of the literature. *International Journal of Behavioral Nutrition and Physical Activity*. 2006; 3(19).
- ¹⁴ Bodor J, Rose D, Farley T, et al. "Neighborhood fruit and vegetable availability and consumption: the role of small food stores in an urban environment." *Public Health Nutrition*, 11(4): 413-420, April 2008.
- ¹⁵ Ogden C, Flegal K, Carrol M, et al. "Prevalence and Trends in Overweight Among US Children and Adolescents, 1999-2000" *Journal of the American Medical Association*. 2002;288.
- ¹⁶ Mikkelsen, 2004: Bellows, ed; Brown, 2002; Bell, 2005; Community Design for healthy Eating –Barbara McCann. Available at www.rwjf.org/files/publications/other/communitydesign-healthyeating.pdf.
- ¹⁷ Community Design for healthy Eating –Barbara McCann. Available at www.rwjf.org/files/publications/other/communitydesignhealthyeating.pdf.
- ¹⁸ Agricultural Marketing Service. www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?template=TemplateS&navID=WholesaleandFarmersMarkets&leftNav=WholesaleandFarmersMarkets&page=WTFMFarmersMarketGrowth&description=Farmers%20Market%20Growth&acct=fmrdirmarkt.
- ¹⁹ Bregendahl C. "Local Food Consumption and Rural Public Health." www.ncrerd.iastate.edu/projects/csa/NRHA%20article1.pdf.
- ²⁰ Blanchette L, Brug J. "Determinants of fruit and vegetable consumption among 6-12 year old children and effective interventions to increase consumption." *J Hum Nutr Diet*. December 2005: 18(6).
- ²¹ American Farmland Trust. "Farming on the Edge." www.farmland.org/resources/fote/default.asp.
- ²² Ewing R, Schmid T, Killingsworth R, et al. "Relationship Between Urban Sprawl and Physical Activity, Obesity and Morbidity." *The Science of Health Promotion*. 2003. vol 18.

About NACo's Health Programs

NACo's Health programs are designed to help counties find solutions to the health challenges they face in their communities, including increasing access to care, expansion of rural health systems, and advancing programs and policies to prevent childhood obesity. For more information on NACo's Health programs, please contact Anita Cardwell at acardwell@naco.org or 202/942-4267.

Support for this publication was provided by Leadership for Healthy Communities, a national program of the Robert Wood Johnson Foundation.

