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Land Use Tracker

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PLANNING FOR HEALTHY COMMUNITIES

By Rebecca Roberts, Land Use Specialist, Center for Land Use Education

In the United States, two-thirds of adults are overweight and one in three is obese. Obesity-related health care costs are estimated at \$147 billion annually and expected to double each decade. Statistics on the lack of physical activity among children are also alarming. Most children are driven to school in cars or buses, and one in every three is overweight.¹

The U.S. Department of Health recommends a minimum of 30 minutes of moderate physical activity for adults and 60 minutes of moderate to vigorous physical activity for children each day in order to reduce incidents of obesity, diabetes, heart disease, hypertension, and depression.² Yet, most Americans fail to achieve these levels of activity. One reason is the built environment in which we live.

“Healthy communities provide families with safe places to walk, bike and play; convenient access to healthy, affordable foods; and plenty of opportunities for physical activity.”

Research shows that where we live can impact how well we live. Healthy communities provide families with safe places to walk, bike and play; convenient access to healthy, affordable foods; and plenty of opportunities for physical activity. Across the country, policy-makers, community leaders, and individuals in the private sector are collaborating to build such neighborhoods, but we still have a long way to go. This article presents research and recommendations in four general areas to help local officials produce healthier, more vibrant communities.



Promote Walkable, Mixed Use Development

Over the last 40 years, aspects of our built environment have made it difficult for people to walk and bike for recreation and transportation. In 1969, 90 percent of children living within one mile of school walked to school. Today that number has dropped to 35 percent.³ These changes are due, in part, to a built environment that discourages walking and bicycling and promotes driving.

A walkable neighborhood means that residents can easily walk or bike from home to places they need to go—such as schools, shops and workplaces—whenever and as often as they want. A large number of studies have shown that adults living in walkable neighborhoods are more physically active.⁴ On average, residents in highly walkable neighborhoods take twice as many walking trips as those in less walkable neighborhoods, mostly to work or to run errands.⁵ Residents are more likely to walk or ride a bike if they have access to public

transportation and live in a city center, close to a grocery store, drug store, and other businesses.⁶

Promoting walkable, mixed use development is particularly important for encouraging mobility among youth and older adults. Children that have opportunities to walk or ride a bicycle from home to school and other destinations are more likely to get regular physical activity.⁷ Likewise, adults aged 65 and older who live closer to shops and services take more total trips outside the home and are more likely to walk and use public transportation.⁸

A 2007 study of planning directors and residents of 67 counties showed that more sidewalks, bicycle lanes, and trails; more walkable, mixed-use development; and strong planning policies are associated with higher levels of physical activity. Residents of counties with active living environments are more than twice as likely to walk or bike as residents in other counties. This association is even stronger among lower-income residents.⁹



Policy and Program Recommendations:

- Conduct a walkability or bikability audit of your community.
- Develop a dedicated bicycle or pedestrian master plan. Evaluate existing plans for “active transportation” and “complete streets” policies.
- Use a capital improvement plan to continuously plan and budget for sidewalks, bicycle lanes, and trail connections.
- Adopt design guidelines for the construction of new streets, sidewalks, and trails.
- Maintain relatively small, grid-like blocks in urban areas. Improve connectivity of existing areas by retrofitting large blocks, cul-de-sacs, and dead-end streets with pedestrian and bicycle paths.
- Provide for a mix of land uses including homes, schools, retail stores, office space, cultural and community space, and recreational facilities.
- Create desired patterns of development by using form-based zoning, planned unit developments, and traditional neighborhood development.
- Promote transit-oriented or transit-adjacent development.
- Design roads to be the minimum width and have the minimum number of lanes practical.
- Allow for shared or reduced car parking if walking, bicycling and public transit are convenient alternatives.

Do you live in a walkable community? Find out with these tools:

Walkability Checklist

www.saferoutesinfo.org/sites/default/files/walkabilitychecklist.pdf

Bikeability Checklist

www.bicyclinginfo.org/pdf/bikabilitychecklist.pdf

Healthy Development Checklist

www.walkable.org/assets/downloads/healthy_development_checklist.pdf

Rural Active Living Assessment Tool

www.activelivingresearch.org/node/11947

“Children playing outside—in spaces dedicated for play or not—signify a vibrant, healthy community. In cities and towns across America, however, children just don’t get out and play as they used to. The barriers to play include increased screen time, reductions in school-based playtime, more traffic, less open space, run-down play areas, and caregivers’ fears about safety. As children become more sedentary, the loss of play has serious consequences for health, education, and community development.”

Executive Summary, Play Matters, 2009

Increase Access to Parks, Open Space, and Recreational Facilities

An increasing body of evidence suggests that children who live in communities with open spaces—such as parks, ball fields, nature centers, picnic areas and campgrounds—are more physically active than those who live in areas with fewer recreational facilities.¹⁰ One study evaluating the relationship between physical activity and the natural and built environment found that people with greater access to open space are 43 percent more likely to exercise for 30 minutes on most days compared to those with poorer access.¹¹

A 2006 study of more than 1,500 teenage girls found that they achieved 35 additional minutes of weekly physical activity for each park that was within one-half mile of their homes.¹² Likewise, a 2007 study of low-income areas found that people who live within one mile of a park exercised at a rate 38 percent higher than those who lived farther away, and were four times as likely to visit a park at least once a week.¹³ Other studies have found that adults who live near recreational facilities or have aesthetically pleasing places where they can be active have higher levels of recreational physical activity.¹⁴⁻¹⁵

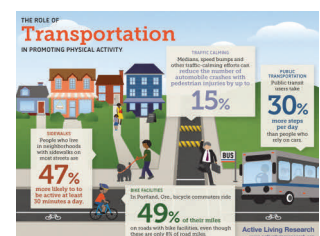
Connecting recreational facilities with other community destinations can reduce barriers individuals face in being physically active (i.e. cost, convenience, and access). In one survey of rural residents, more than half said that they walked more often after a nearby trail opened.¹⁶ Opening up schoolyards and other gathering places to the public is another way to increase physical activity.

Policy and Program Recommendations:

- Assess quantity, quality, and access to parks, playgrounds and recreational facilities in your community.
- Use a capital improvement plan to budget for new facilities and provide ongoing maintenance.
- Design parks, playgrounds, and recreational facilities to accommodate a range of age groups, activities in different seasons, and local cultural preferences.
- Locate schools, residences, and places of work near parks, walking paths, trails, and waterfront recreation areas.
- Use subdivision exactions and impact fees to acquire and improve parks serving new development.
- Allow higher density development in exchange for open space preservation.
- Convert vacant lots and abandoned rail corridors into community gardens, parks, trails and greenways.
- Partner with land trusts, conservation organizations, and other community groups to sponsor and maintain parks, green spaces, and community gardens.
- Design new school facilities to allow for public use outside of school hours. Develop a joint-use agreement allowing community members to utilize school facilities.
- Include trees and objects of visual interest on streets, sidewalks, and trails. Orient paths toward interesting views.
- Link parks, open space, and recreational facilities with community destinations. Provide signage that includes directions, distances, and times to various destinations.

Keep Communities Safe and Free From Crime to Encourage Outdoor Activity

While unsafe environments are usually associated with violence, they also can include dilapidated, inadequate physical infrastructure that is unsafe for physical activity. Access to



View data sources and additional infographics at: www.activelivingresearch.org/blog

safe places to play, such as parks and school playgrounds improves the likelihood that children will be physically active.¹⁷⁻¹⁸ Unfortunately, loss of financial resources and public commitment to children's play is reflected in the quality of spaces that exist and are accessible. In 2002, 29 percent of all playgrounds surveyed nationally contained one or more pieces of hazardous equipment.¹⁹

Parents' perceptions of safety in their neighborhoods, from concerns about traffic to strangers, can also determine the level of activity in which their children engage.²⁰⁻²¹ In one study, youth living in safe neighborhoods engaged in physical activity for an additional 49 minutes per week than youth living in unsafe neighborhoods.²²

Access to schools, parks, playgrounds, and other community destinations also matters. Findings from 33 studies show that children are more physically active when sidewalks provide access to destinations such as schools, but less likely to walk if they are confronted with traffic hazards and unsafe intersections.²³ In one study, adding and improving bicycle lanes, traffic signals, sidewalks, and crosswalks increased the number of children walking or bicycling to school. Students were three times more likely to start walking or bicycling on routes where improvements had been made.²⁴

Does your community include safe places for physical activity? Find out with these tools:

Safe Growth America Checklist
www.planning.org/aicp/symposium/2004

Wisconsin Safe Routes to School Toolkit
www.dot.wisconsin.gov/localgov/aid/saferoutes-toolkit.htm

Pedestrian Road Safety Audit
<http://katana.hsrb.unc.edu/cms/downloads/PedRSA.reduced.pdf#page=112>

Community Park Audit Tool
www.activelivingresearch.org/node/12700

Providing safe sidewalks, bike trails, and traffic calming devices can also lead to increased physical activity among adults.²⁵ This is particularly important for certain populations such as the elderly, who are more vulnerable to pedestrian accidents due to slower reaction times and limited mobility. In 2007, individuals aged 65 and older made up 12.5 percent of the U.S. population but comprised 19 percent of all pedestrian fatalities.²⁶

Policy and Program Recommendations:

- Conduct a community safety audit.
- Develop a safe routes to school program.
- Makes streets and paths universally accessible to the elderly and disabled by including curb cuts, auditory crossing signals, and adequate crossing times.
- Employ traffic calming measures such as curb extensions, raised crossings, medians, speed bumps, and roundabouts to make roads safer for cars, bicyclists, and pedestrians.
- Encourage street activity by creating a buffer from moving vehicles using street trees, benches, planters, and other infrastructure.
- Pay special attention to the treatment of sidewalks and bikepaths near parks, schools, and intersections.
- Provide exterior lighting near sidewalks, paths, and active play areas to extend opportunities for physical activity into the evening.
- Enact ordinances and policies that encourage owners to build on vacant lots and revitalize vacant properties.

Provide Access to High-Quality, Healthy, Affordable Foods

Eating a healthy diet that includes fresh fruits and vegetables helps to reduce risks of obesity and chronic diseases.²⁷ Unfortunately, many communities lack access to healthy food options. One study found that adults living in areas with one or more supermarkets are more likely to meet dietary recommendations for fruits and vegetables than adults living in areas with no supermarkets.²⁸ Research also suggests that greater access to supermarkets may be related to a reduced risk of obesity, while greater access to fast food and convenience stores may be related to an increased

risk of obesity.²⁹⁻³² Overall, food environments that offer a greater variety of healthy food options at affordable prices can lead to healthier food choices.³³

To increase the quality and availability of fresh, healthy foods, a growing number of local communities are turning to farmers' markets, farm stands, farm-to-school programs and community gardens. Community and school gardens provide access to fresh produce, green space, opportunities for environmental education, and potential cost savings on food. In one study, community gardeners reported annual savings on food bills of \$700 per family.³⁴ In another study, students' perceptions of vegetables significantly improved, as did their preference for fruits and vegetables after participating in a school gardening program.³⁵

Policies that increase local sources of food have the potential to provide consumers with healthier choices, farmers with more marketing opportunities, and communities with powerful economic development opportunities.

Policy and Program Recommendations:

- Create a food policy council to advance healthy food options in your community.
- Conduct a community food system audit.
- Add language to comprehensive and sustainability plans to promote healthy food.
- Encourage the development of grocery stores near residences and places of work.
- Provide public transportation to food retailers.

- Encourage mixed-use and planned unit developments to include food retail options.
- Design grocery stores and parking areas to accommodate pedestrians, cyclists, automobiles, and loading trucks safely and conveniently. Provide infrastructure such as bike racks and drinking fountains.
- Relax zoning requirements that make it difficult for grocery stores to locate in rural and urban areas.
- Provide grants, loans, tax incentives, and small business development programs to encourage grocery stores to open in underserved areas.
- Adopt policies to ensure that recently closed grocery stores are replaced by others.
- Provide space for farmers' markets, farm stands, mobile food carts, and community gardens. Consider a winter farmers' market.
- Support procurement of locally grown food through government and school contracts.

Acknowledgments

Portions of this article were adapted from the following reports:

Leadership for Healthy Communities: Action Strategies Toolkit

Robert Wood Johnson Foundation, 2011
www.leadershipforhealthycommunities.org

Active Design Guidelines: Promoting Physical Activity and Health in Design

City of New York, 2010
<http://centerforactivedesign.org/guidelines>

References can be found on page 12

Opportunities Exist to Plan for Food and Agriculture in Rural and Urban Communities



PAVING THE WAY FOR COMPLETE STREETS

For decades, the fields of transportation planning and design focused on moving able-bodied adults in automobiles, creating a system that provides reasonably good mobility and convenience for millions of Americans. However, the needs of travelers outside that group, including younger or older people, those with disabilities, and those who travel by transit, bicycle, or foot, have been routinely overlooked.

Neighborhoods lack safe places to walk or bicycle, and access to key community resources such as parks, shops, grocery stores, and schools is now dependent on access to an automobile. Thousands of people are injured or killed while walking or bicycling each year, in part due to the inhospitable built environment. Buses move down streets slowly, and drivers – when not speeding along neighborhood streets – are caught in traffic jams on major arterials.

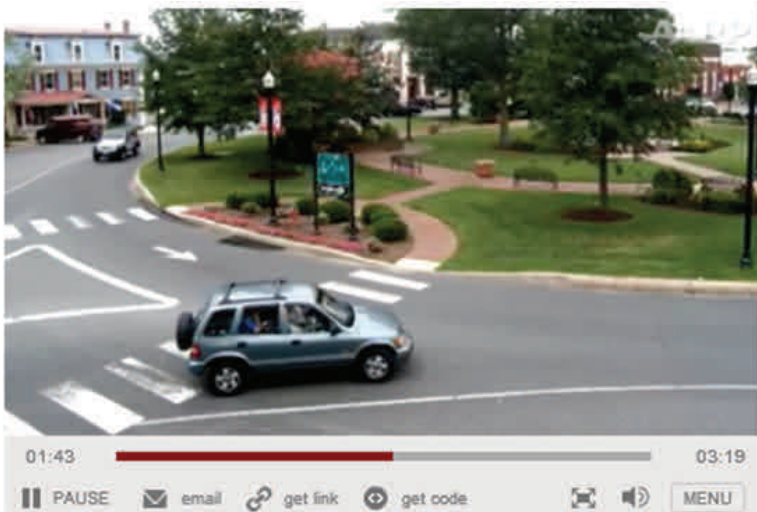
The Complete Streets movement aims to develop integrated, connected networks of streets that are safe and accessible for all people, regardless of age, ability, income, ethnicity, or chosen mode of travel. Complete Streets make active transportation such as walking and bicycling convenient; provide increased access to employment centers, commerce, and educational institutions; and allow greater choice in traveling.


The term Complete Streets means much more than the physical changes in a community's streets. Complete Streets means changing transportation planning, design, maintenance, and funding decisions. A Complete Streets policy ensures that, from the start, projects are planned and designed to meet the needs of every community member, regardless of their age, ability, or mode of travel. Doing so allows a community to save money, accommodate more people, and create an environment where every resident can travel safely and conveniently.

Complete Streets can be achieved through a variety of means including plans, policies ordinances, resolutions, and design manuals. In August 2011, the City of LaCrosse became the first municipality in Wisconsin to adopt a Complete Streets law. The Green Complete Streets Ordinance requires that bicycles and pedestrians be considered when reconstructing city streets. It also requires that the road projects include best practices in landscaping, stormwater management, and air quality. Complete Streets policies have also been passed by La Crosse County and several neighboring cities and villages.

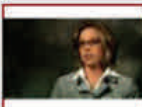
Examples of Complete Streets elements are shown on the next two pages.

[Planning Complete Streets for an Aging America](#) – videos and report from the AARP Public Policy Institute showing how Complete Streets can help older adults.






Benefits of Complete Streets
Video from AARP Public Policy Institute showing how the Complete Streets program can help older adults.



Planning Complete Streets
How to design roads that serve all users



Who's Building Complete Streets...
More than 100 communities around the country

www.aarp.org/research/housing-mobility/transportation/2009_02_streets.html



Photo: www.completestreetsnc.org

Sidewalks

Sidewalks are a crucial element in any pedestrian network. The minimum unobstructed space for a sidewalk is five feet, but widths of six to twelve feet may be necessary depending on the application.



Photo: www.atpolicy.org

Bike Lanes

Dedicated bicycle lanes are typically striped with a painted arrow and cyclist icon. Shared lanes for motorists and cyclists may also be used if traffic speeds and volumes are low.



Photo: Community Placemaking Graphics Library

Multi-Use Paths

A multi-use path separates pedestrian and bicycle traffic from vehicular traffic. They are popular with recreational walkers, runners, and commuters, particularly where destinations are far apart.



Photo: www.pedbikeimages.org / Dan Burden

Paved Shoulders

In rural areas, shoulders may be the only pedestrian facility. Wide, paved shoulders allow pedestrians and bicyclists to travel in a separate space from traffic. They should be free from debris and obstructions.



Photo: www.pedbikeimages.org / Dan Burden

Pedestrian Crossings

Pedestrian crossings provide for pedestrian visibility and serve to assign the right of way. Crossing treatments include signage, marked crosswalks, midblock crossings, and pedestrian beacon signals.



Photo: www.pedbikeimages.org / Dan Burden

Bicycle Parking

Bike racks should be provided at all pedestrian destinations including schools, parks, transit stops, and places of commerce and work. Bike racks on buses provide a smooth transition to public transit.



Photo: www.flickr.com / Brendan Riley

Lighting

Pedestrian-scale lighting helps to illuminate sidewalks and improve perceptions of safety. Lighting is needed near transit stops, commercial areas, and other areas with night-time activity.

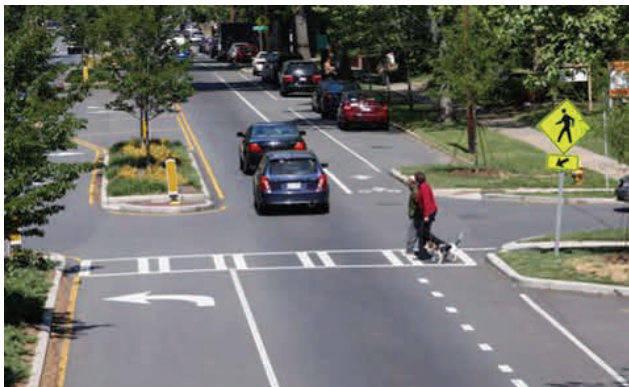


Photo: www.completestreetsnc.org

Traffic Calming

Traffic calming measures such as curb extensions, medians, speed bumps, and other physical devices help to control traffic speeds and improve conditions for non-motorized street users.

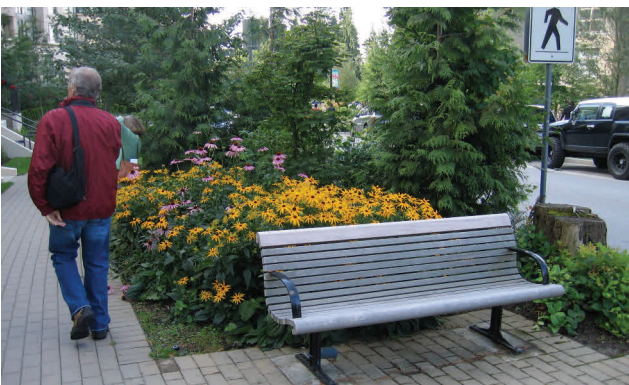


Photo: www.pedbikeimages.org / Carl Sundstrom

Streetscaping

Streetscaping in the form of trees, landscaping, public art, and street furniture serves to slow vehicular traffic and create an inviting public realm. It should not impede pedestrian travel or visibility.



Photo: Community Placemaking Graphics Library

Signage

Signage alerts motorists that pedestrians may be present and assists with wayfinding by providing directions, distances, and times to various destinations.



Photo: www.pedbikeimages.org / Dan Burden

Transit Connections

Complete streets provide safe and convenient access to public transit for all users. Creating safe and comfortable bus stops and providing predictable service makes transit an attractive option.

Acknowledgments

Portions of this article were reprinted from:

Complete Streets Local Policy Workbook
Smart Growth America, 2012
www.smartgrowthamerica.org/complete-streets

Complete Streets Planning & Design Guidelines
North Carolina Dept. of Transportation, 2012
www.completestreetsnc.org

Additional Resources

Complete Streets Slideshow
www.slideshare.net/CompleteStreets/complete-streets-presentation

Wisconsin Complete Streets
www.dot.wisconsin.gov/projects/bike.htm

SURVEY REVEALS COMMUNITY PREFERENCES

Since the last Community Preference Survey was conducted in 2004, there have been major changes in the housing market and economy. Property values dropped, foreclosures hit record highs, and fluctuating gas prices made long commutes more costly. The 2011 Community Preference Survey takes an updated look at characteristics consumers are looking for when buying a house and policies they would support to improve their communities. Highlights include:

- When selecting a community, nearly half of the public (47%) would prefer to live in a city (19%) or suburban neighborhood with a mix of houses, shops, and businesses (28%). Another four in ten (40%) would prefer a rural area (22%) or small town (18%). Only one in ten (12%) say they would prefer a suburban neighborhood with houses only.
- Seven times more people say the neighborhood where a house is located (88%) is a bigger consideration in deciding where to live than the size of the house (12%).

“There were no sidewalks where I lived so there were no people out and about. It didn’t have that community feel that I like.”

– Outer suburban man

- Community factors such as high quality public schools (75% very or somewhat important) and sidewalks and places to take walks (77%) are among the top community characteristics people consider important when deciding where to live.
- Two-thirds (66% very or somewhat important) see being within an easy walk of places in their community as an important factor in deciding where to live. Specifically, being within an easy walk of a grocery store (75%), pharmacy (65%), hospital (61%), and restaurants (60%) is important to at least six in ten Americans.

“Quality of life is convenience for me. Being able to walk to public transportation means I spend less time commuting. We could have a bigger house somewhere else, but it wouldn’t be worth it for me.”

– Urban/inner suburban man

- Americans put a higher priority on sidewalks and having places to take walks (77%, important), than on being within walking distance of specific places (66%).
- While walkability is generally viewed as a positive aspect of a community, many Americans would prefer to live in an area with houses built on larger lots, even if it means they would have to drive to schools, stores, and restaurants (61%) or parks, playgrounds, and recreation areas (56%).
- While most Americans would not give up a larger lot to avoid driving to places in their community, they would sacrifice lot and house size to shorten their commute. Six in ten (59%) would prefer a community with smaller houses on smaller lots if their commute was 20 minutes or less. Four in ten (39%) would prefer a larger house on a larger lot, even if their commute was 40 minutes or more.
- In considering problems with their current community, Americans believe that their communities lack adequate public transportation (51%, too little), low-income housing (47%), shops or restaurants within an easy walk (46%); places to bike (45%); housing for moderate incomes (42%); places to walk or exercise for fun (41%); sidewalks (40%); and parks and playgrounds (36%).

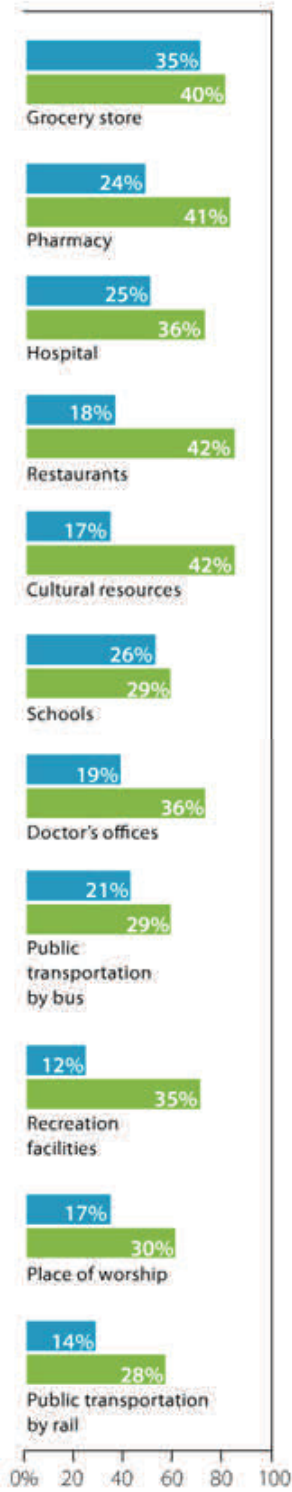
Source

The 2011 Community Preference Survey: What Americans Are Looking For When Deciding Where To Live, National Association of Realtors, 2011

www.stablecommunities.org/sites/all/files/library/1608/smartgrowthcommsurveyresults2011.pdf

Importance of walkability

Very important
Somewhat important



Source: The 2011 Community Preference Survey, National Association of Realtors

CALENDAR OF EVENTS

Active Community Environments Regional Workshops

May 15, 2013 – Madison

May 30, 2013 – Milwaukee

June 4, 2013 – Neenah

www.uwsp.edu/conted/ConfWrkShp/Pages/ActiveCommunitiesTraining.aspx

Local Government Center WisLine

May 15, 2013 – Hearing Zoning Appeals and Variances

<http://lgc.uwex.edu/WisLines/index.html>

Wisconsin Land Information Association Regional Meeting

May 15-16, 2013 – Jefferson Street Inn, Wausau, WI

<http://www.wlia.org>

American Planning Association Audio/Web Conferences

May 15, 2013 – Rethinking the Role of the Urban Freeway

June 5, 2013 – Pedestrian and Bicycle Planning

June 15, 2013 – The 21st Century Planning Commission (recorded replay)

June 26, 2013 – 2013 Planning Law Review

www.planning.org/audioconference

American Planning Association Chapter Webcast

May 24, 2013 – Age Friendly Communities

www.utah-apa.org/webcasts

Plan Commission Workshop

May 30, 2013 – Howard Village Hall, Green Bay, WI

www.uwsp.edu/cnr-ap/clue/Pages/workshops/workshopspc.aspx

American Planning Association–Wisconsin Chapter Conference

June 13-14, 2013 – Blue Harbor Resort, Sheboygan, WI

www.wisconsinplanners.org

Midwest Renewable Energy Fair

June 21-23, 2013 – MREA, Custer, WI

www.midwestrenew.org

Wisconsin Counties Association Conference

September 22-24, 2013 – Alliant Energy Center, Madison, WI

www.wicounties.org

League of Wisconsin Municipalities Conference

October 16-18, 2013 – KI Convention Center, Green Bay, WI

www.wisctowns.com

Wisconsin Towns Association Convention

October 27-29, 2013 – Marriott West, Madison, WI

www.wisctowns.com

For additional dates and information visit the online calendar of events

www.uwsp.edu/cnr-ap/clue/Pages/Calendar.aspx

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If you would like to submit an article,
please contact the managing editor,
Rebecca Roberts. Your article should
be 1,000 words or less, of statewide
concern, and address a land use or
community planning issue.

References

¹ 2008 *Physical Activity Guidelines for Americans*.

U.S. Department of Health and Human Services.

www.health.gov/paguidelines

² "Overweight and Obesity - Facts". Centers for Disease Control and Prevention. Accessed April 2013 at: www.cdc.gov/obesity/data/facts.html

³ *How Children Get to School: School Travel Patterns from 1969 to 2009*. National Center for Safe Routes to School, November 2011.

⁴ Heath G, Brownson R, Kruger J, et al. "The Task Force on Community Preventive Services. The Effectiveness of Urban Design and Land Use and Transport Policies and Practices to Increase Physical Activity: A Systematic Review." *Journal of Physical Activity and Health*, 3(1S): S55-S76, 2006.

⁵ Saelens B, Sallis J and Frank L. "Environmental Correlates of Walking and Cycling: Findings from the Transportation, Urban Design, and Planning Literatures." *Annals of Behavioral Medicine*, 25(2): 80-91, Spring 2003.

⁶ Giles-Corti B and Donovan R. "The Relative Influence of Individual, Social, and Physical Environment Determinants of Physical Activity." *Social Science and Medicine*, 54(12):1793-1812, June 2002.

⁷ See reference 6.

⁸ Bailey L. *Aging Americans: Stranded without Options*. Washington DC: Surface Transportation Policy Project. April 2004. www.transact.org/library/reports_html/seniors/aging.pdf.

⁹ Aytur S, Rodriguez D, Evenson K, et al. "Promoting Active Community Environments through Land Use and Transportation Planning." *American Journal of Health Promotion*, 21(4S): 397-407, March/April 2007.

¹⁰ Davison K and Lawson C. "Do Attributes in the Physical Environment Influence Children's Physical Activity? A Review of the Literature." *International Journal of Behavioral Nutrition and Physical Activity*, 3(19), March 2006.

¹¹ See reference 6.

¹² Cohen D, Ashwood J, Scott M, et al. "Public parks and physical activity among adolescent girls." *Pediatrics*, 118(5): 1381-1389, November 2006.

¹³ Cohen D, McKenzie T, Sehgal A, et al. "Contribution of public parks to physical activity." *American Journal of Public Health*, 97(3): 509-514, January 2007.

¹⁴ Saelens B and Handy S. "Built environment correlates of walking: A review." *Medicine and Science in Sports and Exercise*, 40(7S): S550-66, July 2008.

¹⁵ Sallis J and Kerr J. "Physical activity and the built environment." *President's Council on Physical Fitness and Sports Research Digest*, 7(4):1-8, December 2006.

¹⁶ Brownson R, Housemann R, Brown D, et al. "Promoting Physical Activity in Rural Communities: Walking Trail Access, Use, and Effects." *American Journal of Preventive Medicine*, 18(3): 235-241, April 2000.

¹⁷ Farley T, Meriwether R, Baker E, et al. "Safe play spaces to promote physical activity in inner-city children: results from a pilot study of an environmental intervention." *American Journal of Public Health*, 97(9): 1625-1631, September 2007.

¹⁸ Choy L, McGurk M, Tamashiro R, et al.

"Increasing Access to Places for Physical Activity through a Joint Use Agreement: A Case Study in Urban Honolulu." *Preventing Chronic Disease*, 5(3): A91, July 2008.

¹⁹ Weintraub, R and Cassady A. *Playing it Safe: The Sixth Nationwide Safety Survey of Public Playgrounds*. Consumer Federation of America, June 2002.

²⁰ *Does the built environment influence physical activity? Examining the evidence*. (Special Report 282). Washington: Transportation Research Board/Institute of Medicine, March-April 2005.

²¹ Timperio A, Crawford D, Telford A, et al. "Perceptions about the local neighborhood and walking and cycling among children." *Preventive Medicine*, 38(1): 39-47, January 2004.

²² Molner B, Gortmaker S, Bull F, et al. "Unsafe to play? Neighborhood disorder and lack of safety predict reduced physical activity among urban children and adolescents reduced physical activity among urban children and adolescents." *American Journal of Health Promotion*, 18(5): 378-386, May 2004.

²³ See reference 10.

²⁴ *Walking and Biking to School. Making it Safe. Traffic Safety Center Evaluation Delivered to the State Legislature*. Berkeley, CA: Online Newsletter of the UC Berkeley Traffic Center, 3 (4), Winter 2006-2007.

²⁵ *Designing for Active Living Among Adults, Research Summary*, San Diego: Active Living Research, Spring 2008.

²⁶ *Traffic Safety Facts: Older Population*. National Highway Traffic Safety Administration. 2007.

²⁷ *Dietary Guidelines for Americans*. U.S. Depts. of Agriculture/Health and Human Services. December 2010.

²⁸ Morland K, Wing S and Diez Roux A. "The contextual effect of the local food environment on residents' diets: the Atherosclerosis Risk in Communities Study." *American Journal of Public Health*, 92(11): 1761-1768, November 2002.

²⁹ Powell L, Auld M, Chaloupka F, et al. "Associations between access to food stores and adolescent body mass index." *American Journal of Preventive Medicine*, 33(4S): S301-S307, September 2007.

³⁰ Liu G, Wilson J, Qi Rand Ying J. "Green neighborhoods, food retail and childhood overweight: differences by population density." *American Journal of Health Promotion*, 21(4S): 317-325, January 2007.

³¹ Stafford M, Cummins S, Ellaway A, et al. "Pathways to obesity: Identifying local, modifiable determinants of physical activity and diet." *Social Science and Medicine*, 65(9):1882-1897, November 2007.

³² Inagami S, Cohen D, Finch B, et al. "You are where you shop. Grocery store locations, weight, and neighborhoods." *American Journal of Preventive Medicine*, 31(1): 10-17, 2006.

³³ Morland K, Diez Roux A and Wing S. "Supermarkets, Other Food Stores, and Obesity" The Atherosclerosis Risk in Communities Study." *American Journal of Preventive Medicine*, 30(4): 333-339, April 2006

³⁴ Washington K. *Who is Raising Food in Cities? From Backyard Gardeners to Commercial Growers*. Community Food Security Coalition, February 2002.

³⁵ Cavaliere D. "How Zucchini Won Fifth-Grade Hearts." *Children Today*, 16(3):18-21, February 1987.

Cover Photo

Bicyclist on shared use path along the Charles River, Boston, MA. www.pedbikeimages.org/ Laura Sandt