Robert Wood Johnson Foundation

Published: October 1, 2008
Last Updated: January 25, 2011
Product Type: National Program Report
Grant ID: PAP

Active Living Research

SUMMARY

Active Living Research is an ongoing national program of the Robert Wood Johnson Foundation (RWJF) to identify environmental factors and policies that can substantially increase levels of physical activity and to provide policy-makers with evidence about how to create more activity-friendly communities.

The program's specific objectives are to:

- Establish a strong research base regarding the environmental and policy correlates of physical activity.
- Help build a transdisciplinary field of physical activity, policy and environmental researchers. RWJF describes transdisciplinary field building as "a process by which researchers work jointly using a shared conceptual framework that draws together discipline-specific theories, methods and measures."
- Facilitate the use of research to support policy change.

Key Results

Between April 2001 and June 2008:

- The national program office funded 122 research studies, including 21 dissertation grants, six diversity partnership grants and 11 case studies. A substantive proportion of these studies addressed barriers to and/or strategies for creating more physical-activity friendly environments and promoting everyday physical activity in high-risk, low-income and racial/ethnic minority populations and communities. A significant portion of all grants focused on children, adolescents and their families.
- Funded investigators published more than 98 papers in peer-reviewed journals, including in special issues, special sections or supplements of four journals supported by the program.
- As of September 2006, 15 investigators reported that their *Active Living Research* grant helped them leverage $8.7 million in other funds, or about $580,000 per investigator.

- As of June 2006, funded investigators reported the development of 121 new courses, seminars, lectures, supervision or other educational programs related to active living at their educational institutions.
- The national program office helped create a $20-million obesity and built environment initiative led by the National Institute of Environmental Health Sciences in cooperation with other National Institutes of Health (NIH) institutes and the Centers for Disease Control and Prevention (CDC).

Key Evaluation Findings

From June 2006 to July 2007, two evaluation teams from Gutman Research Associates (Cranbury, N.J.) and Group Health Community Foundation (Seattle), assessed the program's success in meeting its original objectives and its potential to adapt in light of a change in RWJF's focus from physical activity in general to preventing childhood obesity. They collected data mostly in mid-to-late 2006.

- *Active Living Research* contributed to building a research base about environmental correlates of physical activity. Between 2000 and 2006, the number of published papers about these connections increased from 45 to 301.
- *Active Living Research* investigators came from more than 20 disciplines. Some 31 percent had five years or less research experience when they received their *Active Living Research* grant. Some 26 percent of investigators are people of color.
- *Active Living Research* made some progress in contributing to policy discussions, but the program's influence is in its early stages, and it can do more in this area.
- *Active Living Research* is well positioned to support RWJF's goal to prevent and reduce childhood obesity. In 2002, when RWJF established this major goal, *Active Living Research* began giving some priority to studies in this area. Overall, since its inception through June 2007, *Active Living Research* has funded 42 studies that focus on young people; 13 of those explicitly address obesity.

Program Management

RWJF established a national program office at San Diego State University to manage *Active Living Research* and provide assistance to funded researchers.

To establish the research base, the national program office:

- Issued seven rounds of Calls for Proposals (CFPs) soliciting investigator-initiated studies addressing priority topics.
- Commissioned papers and funded supplemental studies and special projects to address issues not covered via the CFPs.

To build a transdisciplinary field of physical activity, policy and environmental researchers, the national program office:

- Supported dissertation studies by students engaged in transdisciplinary research as part of their doctoral programs.
- Issued diversity partnership grants to researchers studying active living issues in minority or underserved communities.
- Convened annual conferences and sponsored seminar programs that brought together researchers and policy-makers from a variety of disciplines.
- Encouraged applicants to apply in teams consisting of investigators from multiple disciplines.
- Created a Web site to aid researchers; it includes information on grants and results, literature searches, tools and resources, and conference information.

To increase the likelihood that research findings would be used by policy-makers, the national program office:

- Prepared Research Summaries synthesizing research findings so as to make them practical for policy-makers to use.
- Devoted one round of Call for Proposal projects to case studies of on-the-ground initiatives.
- Worked with the RWJF program *Leadership for Healthy Communities,* its member national organizations representing elected and appointed officials and targeted advocacy organizations to disseminate key findings.
- Worked closely also with RWJF communications staff to disseminate key findings to critical stakeholder groups (e.g., policy-makers and practitioners at the institutional, community, state or national level).

Funding

In July 2000, RWJF's Board of Trustees authorized up to $12.5 million for the research budget for *Active Living Research.* In October 2007, the Trustees authorized up to an additional $22.1 million for the program, of which $15.4 million was for research.

THE PROBLEM

Physical inactivity is an important modifiable threat to health across the population and to living independently in later years. According to researchers at San Diego State University, despite well-documented benefits of physical activity, at least 60 percent of adults do not meet the recommendation in the 1996 *U.S. Surgeon General's Report on*

Physical Activity and Health that people engage in 30 minutes of moderate-to-vigorous physical activity most days of the week.

The percentage of people who are overweight or obese changed little between 1960 and 1980 according to the CDC (see *Chartbook on Trends in the Health of Americans*, page 39). The prevalence of overweight and obesity began to increase in 1980, *U.S. Surgeon General's Report on Physical Activity and Health* and in 1999–2000, some 65 percent of Americans aged 20–74 were overweight and 31 percent were obese.

Since the 1970s, the prevalence of childhood obesity more than doubled for children aged 2 to 5 and 12 to 19 and it more than tripled for children aged 6 to 11, according to an Institute of Medicine study.

Most studies on correlates of physical activity focus on psychological and social factors, but emerging research suggests that environmental factors play an important role in promoting or inhibiting active lifestyles. Yet, little is known about the impact of these environmental factors or how to leverage them to promote long-term increases in physical activity.

RWJF STRATEGY

The Robert Wood Johnson Foundation (RWJF) has a history of initiating research programs to increase knowledge about policy and environmental factors contributing to population-level health and illness—and policy and environmental solutions to public health problems. Then it uses that knowledge to inform policy discussions and change.

- The *Tobacco Policy Research and Evaluation Program* (TPR), (1992–1998), used research as a means to influence policies regarding tobacco use.
- The *Substance Abuse Policy Research Program* (SAPRP), created in 1994 and now in its 14th year, funds experts in a variety of fields to research policy issues related to substance abuse as a way to reduce harm caused by alcohol, tobacco and illicit drug use. (For more information see Grant Results.)
- *Bridging the Gap: Research Informing Practice and Policy for Healthy Youth Behavior*, created in 1997 and still in existence, is a program to improve understanding of the role of policy and environmental factors in youth alcohol, illicit drug and tobacco use, as well as diet and physical activity, to evaluate their effectiveness in reducing substance use and obesity among youth.

Research findings published in the 1990s began to demonstrate connections between physical activity, obesity and health. In 1997, Michael McGinnis, M.D., M.P.P., a former vice president at RWJF and now a senior scholar at the Institute of Medicine, put physical activity on RWJF's short list of topics for priority funding through the Foundation's

Health and Behavior Program Management Team led by C. Tracy Orleans, Ph.D., distinguished fellow and senior scientist at RWJF.

Shortly thereafter, RWJF created several projects aimed at reducing obesity and increasing physical activity among the general population. By the early 2000s, these projects had evolved into a suite of initiatives promoting "active living," which was defined as re-engineering physical activity into everyday life through policy changes and changes to the built environment.

RWJF defines "active living" as a way of life that integrates physical activity into daily routines. Rather than addressing inactivity and obesity as individual motivation or education problems, active living focuses on how the built environment—neighborhoods, transportation systems, buildings, parks and open space—can promote physical activity and healthy eating by supporting healthy choices.

RWJF's Other Work in the Field

Once active living became a priority for RWJF, the Health and Behavior Program Management Team established several interrelated national programs, including *Active Living Research,* with grants totaling about $74.5 million:

- *Active for Life®: Increasing Physical Activity Levels in Adults Age 50 and Older!* tested two evidence-based programs aimed at increasing physical activity among sedentary people age 50 or older by incorporating physical activity into their daily routines. (For more information see Grant Results.)
- The *Active Living Resource Center* (funded through January 2009) provides information and technical assistance about physical activity to community agencies trying to create active communities. See Grant Results for more information.
- *Leadership for Healthy Communities: Advancing Policies to Support Healthy Eating & Active Living* provides expertise and technical support to elected and appointed officials. Starting out as *Active Living Leadership* and dealing only with active living issues, this program expanded in 2006 to include healthy eating policies.
- *Active Living by Design* funded 25 initiatives created by community partnerships to increase physical activity in their towns or cities, and was expanded in 2008 to fund 100 community partnerships focused on both active living and healthy eating. This broader initiative has been named *Healthy Kids, Healthy Communities.*
- The *Active Living Network* disseminated information about active living concepts and initiatives. The network's mission was to build a national coalition of leaders committed to building active, healthy communities. As of January 1, 2008, the *Active Living Network* is no longer operational. See Grant Results for more information.

In 2003, RWJF was reorganized under the direction of a new president and CEO, Risa Lavizzo-Mourey, M.D., M.B.A., to reduce and re-focus its funding priorities and enhance its overall impact. In this reorganization, in response to dramatic evidence for the rapid rise of childhood overweight and obesity and the possibility that parents in the United States could be raising the first generation of children to live sicker and die younger than their parents, childhood obesity prevention emerged as a top priority.

As a result, an existing Childhood Obesity Working Group was re-configured as a strategic program management team, incorporating and expanding the original Health and Behavior program team. Ultimately, the new Childhood Obesity Team adopted the goal of reversing the rise in childhood obesity by 2015, with a special focus on the low-income and racial/ethnic minority populations where rates of childhood obesity were highest and rising fastest. In 2007, RWJF committed $500 million to achieving this goal.

In pursuit of this goal, RWJF has developed or expanded the following national programs to reverse the rise in childhood obesity by 2015:

- *Healthy Eating Research: Building Evidence to Prevent Childhood Obesity*. This program supports investigator-initiated research to identify and assess environmental and policy influences that might improve healthy eating and weight patterns among children.
- *Healthy Eating by Design*, a program within *Active Living by Design*, funds 12 community partnerships testing environmental and policy approaches to providing affordable, healthy and appealing food options to people living in low-income communities.
- *The Intergenerational Programming with the Active for Life Program Sites to Reduce Childhood Obesity* (known in public as Generations Working Together to Prevent Childhood Obesity) funded four *Active for Life* projects to connect older people with children in undertaking activities to prevent or reduce childhood obesity. The program gives special attention to children living in low-income culturally diverse communities.
- *Community-Based Childhood Obesity Prevention* provides additional funds to eight sites participating in RWJF's *Injury Free Coalition for Kids*® national program. These funds allow sites to incorporate healthy eating activities into their efforts to promote physical activity and develop safe play areas. (For more information see Grant Results.)
- The *Childhood Obesity Prevention Pilot Project of the Diabetes Initiative* provides funds to four projects participating in RWJF's *Diabetes Initiative*, allowing them to increase access to healthy food and opportunities for safe physical activity by promoting policy and environmental changes.

- *Bridging the Gap: Research Informing Practice and Policy for Healthy Youth Behavior* switched its focus in October 2005 from improving understanding of the role of policy and environmental factors around youth alcohol, illicit drug and tobacco use to those around diet and physical activity, evaluating their effectiveness in reducing obesity among youth.
- The Childhood Obesity Modeling Network (COMNet) is a collaborative project to create a network of leading childhood obesity modelers in order to strengthen and integrate the existing statistical modeling techniques and measures used to evaluate trends in childhood obesity and accelerate the pace of learning and application of intervention efforts. COMNet builds on RWJF-funded work at the Harvard School of Public Health to develop a mathematical model to simulate the natural history of height and weight changes during growth for children and youth in the U.S. population.

PROGRAM DESIGN

In July 2000, the RWJF Board of Trustees authorized up to $12.5 million for the research budget for a national program originally entitled the *Physical Activity Policy and Environmental Research Initiative*, later changed to *Active Living Policy and Environmental Studies* and then to *Active Living Research.* In October 2007, the Trustees reauthorized the program for up to an additional $22.1 million, which included $15.4 million for research.

The program design encourages experts in exercise science, public health, transportation, urban planning, architecture, the behavioral sciences, recreation, landscape architecture, geography, law enforcement, economics and education to form teams to study environmental factors and policies that are related to physical activity.

The overarching goals of *Active Living Research* are:

- To identify environmental factors and policies that can substantially increase levels of physical activity.
- To provide policy-makers with evidence about how to create more activity-friendly communities.

Active Living Research has three primary objectives to achieve these goals:

- Establish a strong research base regarding the environmental and policy correlates of physical activity.
- Help build a transdisciplinary field of physical activity policy and environmental researchers. RWJF describes transdisciplinary field building as "a process by which researchers work jointly using a shared conceptual framework that draws together discipline-specific theories, methods and measures."

- Facilitate the use of research to support policy change.

The *Active Living Research* design (its focus on collaborative research and policy outcomes and its primary objectives) is modeled on RWJF's *Substance Abuse Policy Research Program* (SAPRP), according to Orleans, Health and Behavior Program Management Team leader. "We had the same focus [as SAPRP]: to changing policies and environments to support healthy behavior at the individual and population levels." (See RWJF's Other Work in the Field.)

THE PROGRAM

James F. Sallis, Ph.D., directs the *Active Living Research* program. Sallis is professor of psychology at San Diego State University and an authority on physical activity interventions and behavioral research. He served on the editorial committee for the 1996 *U.S. Surgeon General's Report on Physical Activity and Health* and is on the editorial board of several journals. The national program office for *Active Living Research* is located at San Diego State University.

National Advisory Committee

RWJF and the national program office established a multidisciplinary national advisory committee to provide expertise and guidance to the program. Committee members:

- Draft sections of *Calls for Proposals.*
- Review proposals and recommend investigators for funding.
- Develop plans for future rounds of funding and topics for future annual conferences.
- Present at *Active Living Research* conferences and seminars reaching a variety of disciplines (e.g., public health, urban studies, psychology, economics, law, exercise physiology, city planning, transportation, criminology, environmental justice and education sectors).

The Planning Phase

Under a planning grant (ID# 041228), from April to August 2001, national program office staff working closely with RWJF program staff:

- Created the program's vision by soliciting ideas from experts in public health, psychology, exercise science, transportation, urban planning—and from advocates.
- Developed a work plan for the first year and drafted the first Call for Proposals (CFP).
- Established an administrative structure and budget for the first year of the program.

The Implementation Phase

Through extensive consultation with experts about important and emerging research and policy concerns regarding environmental correlates of physical activity, the national program office, RWJF program staff and national advisory committee members identified priority areas for the program. (These priority areas are the topics for the rounds of Calls for Proposals, listed under Investigator-Initiated Projects, below.)

With these priority areas as the framework, national program office staff initiated several activities aimed at accomplishing the program's three objectives.

The First Objective: Activities Designed to Establish a Research Base

To establish the evidence base regarding environmental and policy correlates of physical activity, staff at the national program office:

- Solicited investigator-initiated projects.
- Commissioned special papers.
- Issued supplemental grants.
- Supported special projects.

As of June 2008, across all types of research projects, the national program office had received 773 applications and funded 122 studies.

Investigator-Initiated Projects

Between May 2002 and May 2008 the national program office issued nine Calls for Proposals (CFPs). Each set of solicited studies focused on specific topics within the umbrella of environment and physical activity and each required that research teams include multiple disciplines appropriate to the study proposed.

Grant amounts ranged from $30,000 to $600,000, although most were for $200,000 or less. Most grant periods were between one and three years. Between six and 15 studies were funded per each CFP.

Summaries of all funded studies are available online (search by topic, population, etc., or click on the "grant cycle" menu for studies by type and by round). Release date, priority topics and number of projects for each round of CFPs are as follows:

- Round 1, May 2002: *Measurement Tools.* Studies funded: 8.
  - *Example:* From January 2003 to September 2004, researchers at the Cincinnati Children's Hospital Medical Center developed the environmental assessment of public recreation spaces (EAPRS), a tool measuring physical environments of parks and playgrounds.

- Round 2, November 2002: *Environmental Correlates of Physical Activity.* Studies funded: 15.
  - *Example:* From October 2004 to October 2006, researchers at the University of Pennsylvania studied the influence of neighborhood disorder and crime on physical activity. See Project Profile for details.
- Round 3, November 2003: *Special Populations.* Studies funded: 15.
  - *Example:* From April 2005 to September 2006, researchers at the University of Illinois studied patterns of park, trail and sports facility use among Latino Americans living in and near Chicago. See Project Profile for details.
  - *Example:* A Study of Leisure Time Physical Activity in Public Parks in Diverse Communities. See Grantee Profile of Myron F. Floyd, Ph.D.
- Round 4, September 2004: *Case Studies of Policy Change or Innovation.* Studies funded: 11.
  - *Example:* From July 2005 to June 2006, researchers at Columbia University described and analyzed a community physical activity and sports programs designed to reduce violence in one New York City neighborhood. See Project Profile for details about this study.
- Round 5, March 2005: *Analyses of Active Living Policies that Might Affect Other Policy Areas.* Studies funded: 6.
  - *Example:* From July 2006 to June 2008, researchers at the University of Memphis, Tenn., studied the implementation of physical education policies in Mississippi and Tennessee schools.
- Round 6, February 2006: *Influences on Youth Use of Parks, Physical Activity In and Around Buildings, Rural Issues.* Studies funded: 7.
  - *Example:* From January 2007 to December 2008, researchers at the University of Buffalo, N.Y., are examining children's choices of park features for physical activity.
- Round 7, March 2007: *Environmental and Policy Influences on Children's Activities.* Studies funded: 8.
  - *Example:* From February 2008 to January 2010, researchers at Baylor College of Medicine in Houston are assessing the impact of a "walking school bus" on student safety, physical activity and health. Walking school bus programs offer supervised physical activities for children as they walk to and from school.
- Round 8, March 2008: *Evaluations of Policy or Environmental Interventions.* Approximately 16 to be awarded December 2008.

— Proposal included a study of the interactive effects of built environment and social/cultural factors on youth physical activity; a study of the economic determinants and/or impacts of environments and policies affecting youth physical activity; and an analyses of macro-level policies and environmental-change strategies.

- Rapid Response Grants, May 2008: *Active Living Research and Healthy Eating Research Rapid Response Grants* (awards made on a rolling basis 12–14 weeks after receipt of proposals; grants are for 12 months).

  — The two programs issued the joint CFPs to support time-sensitive, opportunistic studies to evaluate changes in policies or environments with the potential to reach children who are at highest risk for obesity, including African-American, Latino, Native American, Asian-American and Pacific Islander children (ages 3 to 18) who live in low-income communities or communities with limited access to affordable healthy foods and/or safe opportunities for physical activity.

  Research may focus on one or both sides of the energy balance equation—on physical activity (including sedentary behavior), healthy eating or both.

Supplemental Grants on Healthy Eating Research, Obesity and the Built Environment

The national program office provides special grants to investigators engaged in related research supported by funds from sources other than *Active Living Research.* These grants supplement those funds, thereby allowing researchers to conduct more in-depth studies or expand their healthy eating studies to include physical activity. The CFPs for two rounds of *Healthy Eating Research* funding (round 1 and round 2) and Obesity and the Built Environment are online.

As of May 2008, 15 researchers had received supplemental grants, 11 in the area of healthy eating research and four in the area of obesity and the built environment. Summaries of the supplemental grants are available online (click on the "grant cycle" menu and select either "Healthy Eating Research Supplement" or "Obesity and the Built Environment Supplement" for list of grant summaries).

- *Example:* From June 2007 to June 2008, researchers at Mathematica Policy Research, a policy institute based in Washington, analyzed the effects of school physical activity policies on student body mass index (BMI) and obesity.

Special Projects

The national program office funded 10 special projects that addressed specific and unique aspects of active living but that did not fall specifically within particular categories of funding.

Summaries of special projects are available online (click on the "grant cycle" menu and select "Special Project: Study Commissioned by ALR" for list of grant summaries).

- *Example:* From October 2004 to July 2005, researchers at the University of California, Irvine, evaluated the impact of changes in urban design on perceived safety, quality of life and sense of community among residents of Minnie Street in Santa Ana, Calif.

The Second Objective: Activities Designed to Build a New, Transdisciplinary Field

Active Living Research undertook four strategies to build a new field that would engage researchers from a variety of professions and disciplines:

- Commissioned papers.
- Diversity partnership and dissertation grants.
- Annual conferences.
- Seminar program.

Commissioned Papers

Active living studies require collaboration among disciplines with little or no history of working together, so papers were commissioned to describe how various disciplines can contribute to transdisciplinary studies, to recommend research priorities, or to present legal research results. Eleven papers were commissioned. The topic areas were:

- Building design.
- Crime prevention.
- Economics.
- Leisure research.
- Legal basis of zoning.
- Liability for recreation facilities.
- Media environment.
- Perceptions of environments.
- Social equity and environmental justice.
- Transdisciplinary research models.
- Youth obesity.

The 11 papers were published in special issues of three journals:

- Seven papers were published in the *American Journal of Preventive Medicine.*
  - *Example:* Roland Sturm, Ph.D., an economist at the RAND Corporation, wrote a paper entitled "Economics and Physical Activity: A Research Agenda." Available online.
- Three were published in the *American Journal of Health Promotion.*
- One was published in the *Journal of Physical Activity and Health.*

See the Bibliography-Special Journal Issues (commissioned papers are noted) for details and links to online copies.

Diversity Partnership and Dissertation Grants

Building a new field in which people from different disciplines undertake shared studies involves attracting young investigators. It also involves recruiting minority researchers and researchers focused on physical activity patterns of various ethnic groups, given the increasing diversity of our population.

Active Living Research employed two strategies to attract these investigators.

- *Diversity Partnership Grants* supported researchers interested in studying active living issues in minority or underserved communities. Diversity partnership grants were awarded to minority investigators connected with existing *Active Living Research* grants. As of January 2008, six investigators had received diversity partnership grants.
  - *Example:* From December 2005 to March 2007, Robert Brown, Ph.D., at Indiana University-Purdue University Indianapolis, studied how crime and safety levels can serve as potential barriers to outdoor physical activity. The project explored the relationship between actual crime and perceptions of crime in trail neighborhoods and trail use.
- *Dissertation Grants* supported investigators pursuing doctorate degrees in fields related to active living. As of May 2008, 21 investigators had received dissertation grants.
  - *Example:* From October 2005 to June 2007, Amy Vastine Ries, a Ph.D. candidate at the Johns Hopkins Bloomberg School of Public Health, studied factors influencing African-American adolescents' usage of recreation centers and parks for physical activity. See the Grantee Profile of Vastine Ries.

  Grantee Profiles of two other investigators who received dissertation grants are also posted:

— Melissa Nelson, Ph.D., R.D.: Investigating the Community Environment as a Predictor of Patterns of Adolescent Physical Activity and Sedentary Behavior.

— Jeffrey M. Vincent, Ph.D.: Planning and Siting New Public School Facilities in California.

Researchers receiving diversity partnership or dissertation grants also received technical assistance and guidance from national program office staff. Summaries of diversity partnership and dissertation grants are available online (click on the "grant cycle" menu and select either "Dissertation" or "Diversity Partnership Grant (2005)" for list of grant summaries).

Annual Conferences

Since 2004, the national program office has held annual conferences for funded researchers and others interested in active living research. The first day of the conference is designed for *Active Living Research* funded investigators only. Researchers provide summaries of their work and interact with other funded investigators, staff from RWJF and the national program office and invited speakers.

The second day of the conference is open to other researchers. Researchers interested in presenting their work submit abstracts of their papers for peer review. Selected researchers are invited to present at the conference, which features plenary sessions, investigator-initiated presentations and workshops.

The annual conference is often chaired by a past investigator who helps to shape the conference theme and program. The *Active Living Research* 2007 Conference on "Active Living in Diverse and Disadvantaged Communities" was chaired by Myron Floyd, Ph.D. (for more information on Floyd, see his Grantee Profile).

The annual conferences have grown in popularity: 138 people attended in 2004; 285 in 2007; and 322 in 2008. One attendee noted, "Meeting sells out. If you're doing work in this area, that's the place you want to go."

Summaries and slides of conference presentations are available online.

Seminar Program

National program office staff brings in experts to present seminars on selected topics, generally as part of annual conferences of different professional associations. The strategy behind the seminars is to present researchers attending their own profession's conferences with speakers from other disciplines who offer perspectives they would not otherwise hear.

From 2003 to June 2008, *Active Living Research* funded 18 active living seminars. The number of seminars and the number of people attending them have increased over time:

in 2003, the program sponsored one seminar attended by 17 people, and in 2006 it sponsored five seminars attended by 270 people.

- *Example:* In 2007, the national program office sponsored a seminar to help expand the skills of NAASO, The Obesity Society investigators interested in environment and obesity. The seminar focused on utilizing GIS-based (geographic information system) research and methods in studying environmental determinants of obesity.

See Appendix 1 for a list of seminars.

The Third Objective: Activities Designed to Facilitate the Translation from Research to Policy

Active Living Research national program staff undertook four activities aimed at translating research findings for policy audiences:

- Research Summaries and Policy Briefs.
- Case Studies.
- Trainings for researchers.
- Work with RWJF communications staff and consultants.

Research Summaries and Policy Briefs

In response to requests from RWJF's Leadership for Healthy Communities national program office and others, *Active Living Research* staff prepared seven four- to six-page Research Summaries and Briefs aimed at policy-makers:

- *Designing to Reduce Childhood Obesity Research Summary* (February 2005). Focuses on environmental factors that may be related to young people's eating and physical activity patterns.
- *Designing for Active Recreation Research Summary* (February 2005). Focuses on what constitutes an "activity-friendly environment" for recreational physical activity.
- *Designing for Active Transportation Research Summary* (February 2005). Focuses on what makes a community "walkable" or "bikeable" so people can get physical activity as part of their daily routines.
- *Active Living Research Briefing* (March 2005). Provides an overview of research from health, transportation and recreation literature about active living and activity-friendly environments.
- *Active Education: Physical Education, Physical Activity and Academic Performance Research Brief* (Fall 2007). Focuses on the relationship between physical activity and academic performance among children and adolescents.

- *Designing for Active Living Among Children Research Summary* (Fall 2007). Focuses on environmental factors and policies related to young people's physical activity and sedentary behavior patterns, and how these in turn may be related to obesity.
- *Designing for Active Living Among Adults Research Summary* (Spring 2008). Examines the evidence on the connection between the built environment and physical activity among adults.

Case Studies

Policy-makers and advocacy groups told national program office staff that they learn from case studies. Therefore, the fourth CFPs focused exclusively on case studies. This solicitation resulted in 11 case studies.

Summaries of all case studies are available online.

- *Example:* From July 2005 to February 2007, researchers at Boston University documented the history of the Boston Schoolyard Initiative, a public-private partnership that renovated some 70 schoolyards in Boston. See Project Profile for details about this case study.

Full reports of case studies were published in *Journal of Health Politics, Policy and Law* (available online). To maximize the impact of the case studies, each project director wrote an article about lessons learned from his or her study. Robert Cervero, Ph.D., chair of the *Active Living Research* national advisory committee, wrote an article introducing the studies. *Planning Magazine* published the entire series as a special section.

Training Researchers to Present to Policy-Makers

The national program office views its funded investigators as spokespersons for their own research. To help them translate their work for policy-makers, since 2006, the annual program conferences have featured workshops and plenary panels on ways to inform policy-makers about research. Some of these sessions have been held jointly with program staff and project directors from the *Leadership for Healthy Communities* national program, whose constituents are policy-makers.

Communications

The national program office and grantees worked closely first with Health and Behavior Team and, when it was disbanded, the Childhood Obesity Team communications staff and consultants to disseminate *Active Living Research* findings to reach key audiences through a variety of channels—for example, media interviews, press releases, media briefs, policy briefs, Capitol Hill briefings and journal supplements.

CHALLENGES

The national program office faced several challenges in operating the program.

- **A core challenge for the field of active living and one that shapes all *Active Living Research* initiatives is countering the biological drive to conserve energy, leading people to want to remain sedentary and to eat.** This biological tendency is supported by changes in the lifestyle in America over the last few decades. "We are dealing with a big issue," according to Program Director Sallis, "the promotion of sedentary lifestyles in our society. Vast investments in technology, fast foods and automobiles create an uneven playing field in which active living proponents find it hard to be heard."

- **The many disciplines involved in active living have different approaches to research.** Research projects from these disciplines differ in design elements such as measurement tools and sampling methods. Bringing these techniques and approaches together to develop integrated research projects has been difficult.

  National program office staff addressed this challenge by making presentations at conferences of various disciplines, meeting with people individually and developing alliances with people from many fields. For example, by introducing people promoting bicycling for environmental reasons to people promoting bicycling for health benefits, national program office staff spurred research that crosses these disciplines.

  National program office staff also recruited experts from many disciplines to serve as proposal reviewers, national advisory committee members and conference presenters. These efforts facilitated discussion and projects across disciplines. (RWJF addressed the problem of transdisciplinary research in a different way in another program, *Tobacco Etiology Research Network,* which created research networks of investigators from psychopharmacology, behavioral genetics, human development and adolescence, neurobiology, social sciences, epidemiology, clinical medicine and other disciplines who worked together on specific issues involved in the uptake of smoking by youth. See Grant Results.)

- **While a major goal of *Active Living Research* is to make research useful to policy-makers, many *Active Living Research* investigators had limited experience in communicating with policy-makers.** National program office staff have taken two steps to help researchers translate their findings for non-research audiences. They:

  — Starting in 2006, worked with Burness Communications, a firm based in Bethesda, Md., that provides public relations support to nonprofit organizations. Staff at Burness helped *Active Living Research* investigators respond to media inquiries and present their findings to elected officials, community groups or advocates.

— Created and disseminated the *Active Living Research Summaries and Briefs*. As of June 2008, 20,965 hard copies of the summaries and briefs had been distributed and an unknown number had been retrieved from the *Active Living Research* Web site.

- **There have been instances in which the program funded investigators who promised to do more than was possible within the grant amount.** To address this challenge, national program office staff now examines work plans and budgets in more detail and considers feasibility as a selection criterion.
- **Some researchers felt frustrated because they did not know why their applications had been rejected and therefore did not know how to make improvements.** RWJF policies against providing written feedback and the large volume of applications make it impractical for national program office staff to give extensive feedback.

  To address this challenge, national program office staff provides verbal feedback if requested and provides information about preparing proposals at the *Active Living Research* conferences. The annual conference, open to everyone, provides opportunities to learn about the best research in this area.

PROGRAM EVOLUTION

Although its original charge was to study the entire population, when RWJF changed its strategic focus to childhood obesity in 2002, *Active Living Research* began giving increased priority to studies of direct relevance to high-risk and low-income youth.

In several rounds of CFPs, *Active Living Research* funded studies related to children and the places where children and their families go to be active. In this way, the program responded to RWJF's interest in children without abandoning its focus on the entire population.

OVERALL PROGRAM RESULTS

National program office staff presented several overall results of the program in reports to RWJF:

- ***Active Living Research* recruited many investigators engaged in work on the role of the environment in supporting physical activity.** Through June 2008, about 773 different researchers have applied for *Active Living Research* grants, according to a report from the national program director.
- **As of December 2007, *Active Living Research* funded, sponsored or created:**

  — Some 122 studies:

    - 70 from regular CFPs (including 11 case studies).

    - 6 diversity partnership grants.
    - 21 dissertation grants.
    - 10 special project grants.
    - 15 supplemental grants
  - Some 18 seminars.
  - Seven Research Summaries and Briefs.
- **The national program office sponsored or supported special or supplemental issues or sections in six journals:**
  - A 2005 supplement to the *American Journal of Preventive Medicine*.
  - A 2006 supplement to the *Journal of Physical Activity and Health*.
  - A 2007 special issue of the *American Journal of Health Promotion*.
  - A 2007 special section of *Planning Magazine.*
  - A 2008 special issue of the *American Journal of Preventive Medicine*.
  - A 2008 special issue of the *Journal of Health Politics, Policy and Law*.
  - A February 2009 supplement to the *Journal of Public Health Policy*.

  In addition, the national program office provided partial support to special issues of *Leisure Sciences* and the *Journal of the American Planning Association.*

  See the Bibliography for details about these and other publications of *Active Living Research* projects.
- **Some 15 new measurement instruments were completed as of June 2007 and 38 others were under development, according to funded investigators.** Investing in measures helps improve the quality of research for the field as a whole. These and other tools are available online.
- **As of June 2008, 73 funded projects had been completed.** The national program office reported a total of 98 papers published and 12 in press, as of that date. See the Bibliography, Funded Investigators.
- **As of September 2006, 15 investigators reported that their *Active Living Research* grant helped them leverage $8.7 million in other funds, or about $580,000 per investigator.** These investigators represented 35 percent of those with completed grants at that time, according to the evaluation.
- **As of June 2006, funded investigators reported 121 new courses, seminars, lectures, supervision or other educational programs related to active living.** The

following are representative comments by investigators about educational changes resulting from their work:

  - "Our university is working to start a new research and education center focusing on bicycling and walking. Without my work in this area, I don't think we would be doing it."
  - "I have developed a course on bicycle planning that is very consistent with active living ideas and themes."

- ***Active Living Research* helped researchers view their own work in a broader context, one that involves more fields and perspectives.** One researcher noted "I was planning park policies and programs before I became interested in physical activity research. Park planning makes much more sense now."
- **The national program office played an important role in the development of a $20-million National Institute of Environmental Health Sciences (NIEHS) research initiative entitled Obesity and the Built Environment.** NIEHS staff attended *Active Living Research* workshops and annual meetings and national program office staff introduced NIEHS staff to key individuals in the active living field and provided information on the state of current research. *Active Living Research* also awarded supplemental grants (ranging from $10,202 to $51,361) to four grantees of the NIEHS initiative.
- ***Active Living Research* findings also provided key evidence for the CDC's Community Preventive Services Task Force recommendations for street scale and neighborhood scale environmental changes to promote active living.**

Findings from Selected Funded Studies

Researchers receiving grants under *Active Living Research* reported findings from their studies in book chapters and journal articles. Findings from selected studies are as follows. (See Appendix 2 for findings from additional funded studies.)

- **Russell Jago and other researchers at Baylor College of Medicine in Houston analyzed whether environmental features were associated with physical activity among male adolescents.** They found:
  - Sidewalk characteristics (sidewalk location, sidewalk material, presence of streetlights, and number and height of trees) were positively associated with minutes of light intensity physical activity among 10 to 14-year-old Boy Scouts.
  - The distance to the nearest bus or light rail stop was positively associated with minutes of moderate to vigorous physical activity. (Round 2 grant)

  Articles based on this study were published in the *American Journal of Health Promotion* (abstract available online), the *Journal of Physical Activity and Health*

(abstract available online) and the *American Journal of Preventive Medicine* (abstract available online). See the Bibliography, Funded Investigators.

- **Natalie Colabianchi and other researchers at Case Western Reserve University in Cleveland analyzed the effects of renovations to playgrounds using the environmental assessment of public recreation spaces (EAPRS) instrument.** They found:

  — More people used renovated playgrounds compared to unrenovated ones. On average, at any given time about 2.3 people were at the renovated playgrounds compared with 1.6 people who were at unrenovated programs.

  — More people at renovated playgrounds were vigorously active compared with people at unrenovated playgrounds. Most physically active people at either type of playground were children.

  — There were significantly more sedentary people at the renovated playgrounds than sedentary people at the unrenovated playgrounds. (Round 2 grant)

  An article based on this study was published in the *Journal of Physical Activity and Health* and is available online. See the Bibliography, Funded Investigators.

- **Kim D. Reynolds and other researchers at the University of Southern California in Los Angeles studied neighborhood predictors of urban trail use.** They found:

  — Trail use was positively associated with trails that had mixed views, streetlights, were in good condition and featured cafes or other facilities.

  — Trail use was negatively associated with litter, noise, higher vegetation density, drainage features, natural areas adjacent to the trail and the presence of a tunnel. (Round 2 grant)

  An article based on this study was published in the *American Journal of Health Promotion* and is available online. See the Bibliography, Funded Investigators.

- **Pamela Wridt and other researchers at the University of Colorado in Denver explored variables that influenced how children use their local environment for physical activity.** They identified the following variables:

  — Walkability: size of sidewalks; weather; distance to recreation, food or friends; traffic density; and others.

  — Social hazards: teasing and bullying, gang activity and the prevalence of liquor stores and their clientele.

  — Community assets or risk factors: whether there are neighborhood stores or whether recreational facilities are within walking distance. (Diversity Partnership grant)

A chapter entitled "Learning from Learning Landscapes: Promoting Children's Physical Activity Through School Yard Design" appears in a book entitled *Environments, Behaviour and Society*, in press. See the Bibliography, Funded Investigators.

- **Nilda Cosco, Ph.D., at North Carolina State University in Raleigh, analyzed physical activity in outdoor areas surrounding preschools.** She found:
  - The amount of physical activity afforded by preschool play areas can be intentionally improved by design.
  - Play areas containing pathways and natural elements, and combining a range of setting sizes, were found to generate the most child activity.
  - Educational programs that foster outdoor learning are likely to result in greater levels of sustained physical activity. (Dissertation grant)

  A chapter entitled "Preschool Outdoor Environments: An Emerging Opportunity for Children's Daily Active Living" appears in a book entitled *Open Space: People Space*, in press. See the Bibliography, Funded Investigators.

- **Noreen McDonald and Elizabeth Deakin at the University of California, Berkeley, examined national travel survey data to analyze factors affecting travel choices for schoolchildren.** They found:
  - Walking and biking to school declined from 41 percent in 1969 to 13 percent in 2001.
  - Time involved in walking to school is the most relevant factor affecting the decision to walk to school. (Dissertation grant)

  Articles based on this study were published in *Transportation Research Record* and the *American Journal of Preventive Medicine.* The latter is available online. See the Bibliography, Funded Investigators.

- **Melissa Nelson, Ph.D. candidate at the University of North Carolina in Chapel Hill, studied community environment as a predictor of adolescent physical activity and sedentary behavior.** She found:
  - Physical activity and sedentary behaviors co-occur and this co-occurrence should inform strategies designed to promote physical activity:
    - Strategies should include modifying the physical environment and increasing social acceptability of enjoyable activities.
    - Simply restricting adolescent television viewing may not be effective in increasing physical activity.

— Independent of socioeconomic status, there are characteristics of rural, African-American youth that place them at higher risk of overweight compared to their inner-city counterparts. (Dissertation grant)

Two articles based on this study were published in the *American Journal of Preventive Medicine.* Abstract of the 2005 article is available online. Abstract of the 2006 article is also available online. Also see Grantee Profile of Nelson. For citations, see the Bibliography, Funded Investigators.

- **Lawrence Frank at the University of British Columbia, with colleagues Jacqueline Kerr and others at San Diego State University and Lawrence Frank and Company, Atlanta, assessed how the built environment affects physical activity and mobility for Atlanta area youth aged 5 to 20.** They found:

  — Girls and boys were equally likely to walk once a day and were similarly affected by characteristics of the built environment.

  — Non-Whites were significantly more likely to walk once a day than Whites, but were less likely to be affected by the built environment, even after controlling for income level.

  — Children in households with fewer residents were more likely to walk. This may reflect having no one to play with at home. (Special Project grant)

  Articles based on this study were published in the *American Journal of Health Promotion* (available online) and *Transportation Research,* abstract available online. See the Bibliography, Funded Investigators.

The *American Journal of Preventive Medicine's* February 2009 supplement is a six-year report on the origins, strategy and accomplishments *Active Living Research.* In addition to numerous articles detailing the goals and work of the program, the supplement presents results from two independent RWJF-funded evaluations that assessed the degree to which the program achieved its primary aims. A highlight is a series of seven commentaries by distinguished professionals representing a broad range of disciplines, expertise and perspectives.

The supplement is available on RWJF's Web site.

A supplement in the *Journal of Public Health Policy (JPHP)* recaps the 2008 *Active Living Research* Conference. The gathering of more than 300 professionals examined how better environments can encourage people, with a special emphasis on children, to be more active on a daily basis. The conference also looked at how research can be used to influence policy-making. The journal issue can be accessed through the Foundation's Web site.

EVALUATION AND FINDINGS

RWJF has commissioned two evaluations of *Active Living Research:*

- One evaluation analyzed how well *Active Living Research* succeeded in meeting its original objectives.
- The other analyzed its future direction in light of RWJF's 2002 change in strategy to focus on reversing the epidemic of childhood obesity.

Retrospective Evaluation

Marjorie Gutman, Ph.D., principal of Gutman Research Associates, Cranbury, N.J. (ID# 053158) and Dianne Barker, M.H.S., principal of Barker Bi-Coastal Consultants in Calabasas, Calif., assisted by Faith Samples-Smart, Columbia University, took a retrospective look at *Active Living Research.* Gutman and colleagues:

- Explored the extent to which *Active Living Research:*
  - Succeeded in establishing an evidence base for environmental correlates of physical activity.
  - Spurred development of a new transdisciplinary field of research.
  - Influenced policy.
- Examined the extent to which *Active Living Research* stimulated the growth of other funding for research about environmental factors and physical activity.
- Assessed the extent to which *Active Living Research* filled a unique niche in research on physical activity.

During this evaluation, which took place from June 2006 through May 2007, Gutman, Barker, Samples-Smart and colleagues:

- Interviewed 88 *Active Living Research* investigators, national program office staff, national advisory committee members, RWJF staff and representatives of policy-maker, advocacy and funding organizations. The interviews solicited perspectives on and experiences with the program.
- Analyzed results from a 2006 "Active Living Research Impact Survey" administered by the national program office. Some 75 of 87 funded investigators (two were co-principal investigators who responded instead of the principal investigator) and 181 of 492 nonfunded applicants completed the survey. Respondents described their work in active living, offered assessments of various components of *Active Living Research* and recommended future research priorities.
- Analyzed:
  - Funded projects by setting, research type and target population to determine:

- Disciplines represented by investigators.
- Types of studies undertaken.
- Demographic characteristics of people studied.

— Number and disciplines of attendees at annual conferences to ascertain whether the conferences were attended by researchers from a variety of professions.

— No-cost extension requests to determine whether funded investigators were able to complete their projects as proposed.

— The NIH database of relevant grants to ascertain the type and scope of federally funded projects about physical activity and obesity.

Prospective Evaluation

William Beery, M.P.H., Judith Ottoson, Ed.D., M.P.H., and Lawrence Green, Dr.P.H., and colleagues took a prospective look at *Active Living Research* to ascertain its future role in influencing health promotion (ID# 058019). Beery is affiliated with Group Health Community Foundation, Seattle, an evaluation arm of the Group Health Cooperative, a consumer-governed health plan. Ottoson is a private evaluation consultant. Green is affiliated with the University of California, Berkeley.

Researchers:

- Explored the extent to which—and how well—*Active Living Research* is working to build a field of research focused on policy and environmental factors conducive to physical activity and assessed the likely trajectory of the program's future impact.
- Examined strategies that *Active Living Research* could take to influence policy and work more closely with policy-makers.
- Examined ways that *Active Living Research* might evolve to support RWJF's goal of reversing the epidemic of childhood obesity by changing its emphasis to focus on physical activity among children.

During this evaluation, which took place from July 2006 to June 2007, Beery and colleagues:

- Interviewed 59 coordinators of *CDC's State-Based Nutrition and Physical Activity Program to Prevent Obesity and Other Chronic Diseases* to determine whether and the extent to which these state-level policy-makers and practitioners were aware of *Active Living Research.*
- Interviewed 77 policy-makers, advocates, researchers and RWJF and national program office staff members to gather perspectives on *Active Living Research* and thoughts about its future role in creating evidence, building a new field and influencing policy.

- Analyzed scholarly articles published between 1975 and 2006 on physical activity, the built environment, obesity control and childhood obesity to determine whether there had been increased attention to these issues since *Active Living Research* was established.

Evaluation Findings

Evaluators from the retrospective and prospective evaluations reported findings in reports to RWJF. The findings overlap and are described here by theme.

Findings on Establishing a Knowledge Base about Environmental Correlates of Physical Activity (First Objective)

- **Both the Gutman/Barker and Group Health teams found that *Active Living Research* significantly contributed to building a knowledge base about environmental correlates of physical activity.**
  - Almost 40 percent of *Active Living Research* investigators surveyed said they had developed at least one new measurement instrument. (Gutman/Barker)
  - *Active Living Research* studies addressed several population groups:
    - Some 38 percent were devoted to the population as a whole.
    - Some 24 percent focused on children or adolescents.
    - Some 15 percent focused on low-income or minority groups. (Gutman/Barker)

    The relatively high proportion of studies regarding children and adolescents is important given RWJF's emphasis on preventing childhood obesity.
  - The national program office played a major role in synthesizing knowledge generated by funded researchers, including sponsoring special or supplemental issues of peer-reviewed journals. (Gutman/Barker)
  - The analysis of publications "suggests that a field of research and publication on physical activity and environment has emerged since 2001, roughly paralleling creation of the *Active Living Research* program." (Group Health)
  - Between 2000 and 2006, the number of published papers about physical activity and obesity that had environment and policy content increased from 45 to 301. (Group Health)

Findings on Building a Transdisciplinary Field (Second Objective)

- **Both the Gutman/Barker and Group Health teams found that *Active Living Research* did build a transdisciplinary field of science by stimulating partnerships and supporting new and minority researchers.**

- *Active Living Research* investigators come from more than 20 disciplines. The most frequently represented fields are:
  - Physical environment (34 percent).
  - Health (19 percent).
  - Social sciences (12 percent).
  - Nutrition (10 percent). (Gutman/Barker)
- Some 77 percent of investigators surveyed said that *Active Living Research* stimulated new collaborations outside of their institution and outside of their primary discipline. (Gutman/Barker)
- Some 31 percent of investigators surveyed reported they had five years or less research experience at the time they received their *Active Living Research* grant. (Gutman/Barker)
- Some 26 percent of funded investigators surveyed are people of color, a seemingly high proportion given the general underrepresentation of people of color in research. (Gutman/Barker)
- A new field of science has emerged that established connections between physical activity and the environment, but a new profession has yet to emerge. While people are interested in connections across disciplines, new science has not yet created a new professional discipline or an integrated field. (Group Health)

Findings on Facilitating the Translation From Research to Policy (Third Objective)

- **Both the Gutman/Barker and Group Health teams found that *Active Living Research* has made some progress in contributing to policy discussions, but the program's influence is in its early stages and more could be done.**
  - Only 6 percent of funded investigators came from policy sciences such as legal analysis or economics. (Gutman/Barker)
  - Relationships between *Active Living Research* and policy-maker and advocacy organizations ranged from intense to none, with most groups reporting moderate interaction. Representatives of the National Governors' Association and a few other policy organizations reported more extensive, ongoing interactions such as presentations by *Active Living Research* staff at association workshops. (Gutman/Barker)
  - In general, policy-makers interviewed spoke favorably about *Active Living Research*, citing its importance in filling knowledge gaps and giving credibility to the obesity crisis. However, few could provide specific examples of direct policy

contributions or impacts. (Only 10 examples, all at the local level, were provided.) (Gutman/Barker)

- Some 84 percent of policy-makers, researchers and state coordinators of federally funded programs (such as the *Nutrition and Physical Activity Program to Prevent Obesity and Other Chronic Diseases* funded by the CDC) who were not part of *Active Living Research* and were interviewed for the Group Health evaluation had heard of the program, and 66 percent of state coordinators interviewed knew of at least one *Active Living Research* study. (Group Health)
- In general, policy-makers, researchers and state coordinators not part of *Active Living Research* indicated that the program had:
  - Contributed to policy discussions by creating measurement tools that help people understand the problem and by disseminating findings.
  - Helped create coalitions and convene nontraditional partners. (Group Health)
- *Active Living Research's* contributions to the creation of specific policies via legislation could not be substantiated. Of the 81 people who responded to a question asking for specific instances in which *Active Living Research* had influenced policy discussions:
  - Nearly 66 percent were not aware of a contribution.
  - Some 25 percent indicated they were aware of a contribution.
  - About 10 percent were unsure whether *Active Living Research* had made a contribution. (Group Health)

Findings on Whether Active Living Research *Stimulated the Growth of Other Funding Sources and Whether the Program Occupied a Unique Niche*

The Gutman/Barker evaluation examined whether *Active Living Research* was able to involve other funders interested in environmental correlates of physical activity and whether the program occupied a niche that did not duplicate the work of others.

- *Active Living Research* made some headway in stimulating other funding sources, despite level funding from the NIH.
  - Some 68 percent of investigators said they had applied for additional fundng, and more than half of those were funded, generally from the CDC and the NIH.
  - The Mary Black Foundation chose active living as one of its main funding goal areas. Staff at Mary Black noted, "A lot of what we were doing was modeled after a lot of the things that we saw in the Robert Wood Johnson materials."

- *Active Living Research* does fill a distinctive niche in stimulating and supporting research on policy and environmental factors to promote active living. Public agencies and private foundations do not tend to support the kind of studies of policy research that *Active Living Research* funds. Instead, they fund complementary research, notably randomized controlled trials of prevention interventions.

Findings on Whether Active Living Research *is Positioned to Change its Emphasis to Focus on Addressing Physical Activity and Obesity Among Children*

RWJF asked Group Health to examine whether *Active Living Research* could evolve to focus on research supporting RWJF's 2002 decision to focus on preventing and reducing childhood obesity.

- *Active Living Research* can change its focus to support RWJF's priority on preventing childhood obesity. Since its inception through June 2007, *Active Living Research* has funded 42 studies that focus on young people; 13 of those explicitly address obesity. Projects range from analyzing the effectiveness of school physical education programs to examining the risk of inactivity and obesity among minority youth.

Recommendations from the Evaluations

In evaluation reports to RWJF, both Gutman/Barker and Group Heath offered recommendations regarding *Active Living Research* and noted that RWJF could use these recommendations to inform other national programs. Key recommendations include:

To encourage more policy-relevant studies,* Active Living Research *should:

- **Move rapidly to fund studies based on action-oriented programs and the needs of policy-makers and advocates.** By seeking out programs and tracking their impact, researchers could also study implementation and sustainability, both important issues to policy-makers. (Group Health)
- **Fund more policy studies, especially economic analyses and analyses examining the effectiveness of specific policies.** (Gutman/Barker)
- **Devote more attention to studying advocacy groups, political initiatives and efforts of individuals to influence and support policy.** (Group Health)
- **Actively reach out to and seek feedback from policy-makers and practitioners.** For example:
  - Future *Calls for Proposals* could require that applicants include a policy-maker as co-principal investigator.
  - Practitioners and community groups could become integral parts of *Active Living Research* grants by participating in design, data collection and analysis.

- A policy advisory committee or group could be established (perhaps derived from *Leadership for Healthy Communities*) to provide ongoing input to *Active Living Research* investigators.
- National program staff and funded researchers could attend advocacy and policy organization meetings. (Group Health, Gutman/Barker)

- **Recast research findings as parameters.** National program staff or funded researchers could present findings that show a *threshold below* which environmental improvements make no difference on indicators of physical activity and a point of *diminishing returns above* which they make no difference. (Group Health)
- **Provide technical assistance in special skills and issues to investigators undertaking transdisciplinary or policy-focused studies.** Help might include hands-on technical assistance, listservs or Web conferences. (Gutman/Barker)
- **Continue efforts to help researchers understand policy research, the boundaries of advocacy and ways to translate findings into policy-relevant information.** This involves asking useful questions, working with policy-makers in shaping studies and thinking about implementation. (Group Health)
- **Continue the annual conferences, dissertation grants, special project grants and seminars.** Funded researchers found these features useful in exposing them to policy issues and to researchers from other disciplines. (Gutman/Barker)

To influence policy changes more effectively,* Active Living Research *should:

- **Work with other RWJF programs, especially *Leadership for Healthy Communities,* designed to influence policy by coordinating efforts to provide information to state research units and to national policy maker and advocacy organizations.** All RWJF policy research programs should be aware of legislative and advocacy groups' schedules and tap into important milestone dates or events for these organizations. (Group Health, Gutman/Barker)
- **Be more systematic in collaborating with stakeholders from federal agencies.** For example, the program could co-sponsor conferences with federal research and funding agencies. It could also convene meetings between transdisciplinary researchers and federal or state agency staff to identify the most generic issues needing research. (Group Health)
- **More clearly delineate what is acceptable evidence of "influence on policy."** Convincing, explicit cause and effect findings are critical for policy-makers, but are often not conclusive from research studies. (Group Heath, Gutman/Barker)
- **Approach policy as a process including elements such as debate and negotiation, and not only as an outcome, such as a law or regulation.** (Group Health)

- **Prepare and disseminate action-oriented materials that help readers translate research into action.** One policy-maker interviewed indicated "I would suggest stories about how to make successful change happen." A research investigator interviewed said, "Many of us really don't know how to present information in the way that policy-makers most want to see it…" (Gutman/Barker)
- **Package research findings in continuing education programs designed for interdisciplinary teams of practitioners and advocates from organizations and coalitions.** (Group Health)

Communications

The *Active Living Research* Web site averages more than 70,000 visits a year. The Web site includes:

- Lists of references that assist researchers in conducting literature reviews.
- Free access to papers featured in *Active Living Research* journal supplements.
- Information regarding measurement instruments.
- Abstracts of *Active Living Research* grants.
- Slides from *Active Living Research* conference presentations.
- Research Summaries and Briefs that provide unbiased discussions of topics for nonresearchers.
- Lay summaries of all *Active Living Research* grants.

See the Bibliography for details.

Other communications activities described elsewhere include:

- National program office and funded-investigator publications in peer-reviewed journals.
- Seven Research Summaries and Briefs.
- Five annual conferences at which people from a variety of disciplines present their work to colleagues from other fields.
- Some 18 seminars generally held in conjunction with annual meetings of professional associations.

LESSONS LEARNED

1. **"The most important lesson I could offer to national program offices is to find capable and inspired national advisory committee members, advisers, staff and collaborators."** (National Program Director/Sallis)

2. **"Inspiration and commitment to an important mission makes many things possible, but it is important to stay focused and try not to take on too much.** This may mean reevaluating and reprioritizing on a regular basis." (National Program Director/Sallis)

3. **Strike a balance between establishing clear funding priorities at the outset and leaving room to respond to issues, unforeseen at program initiation, that emerge during the life of the program.** The field of active living has evolved quickly and it is important that a national program take advantage of unexpected emerging priorities. (RWJF Program Officers/Bazzarre and Orleans)

4. **Be prepared to spend a lot of time on the road when trying to build a field or create non-traditional partnerships.** RWJF program officers and the national program director spent considerable time meeting with professional groups, attending conferences and meeting with people individually. There is no way to shortcut this hands-on work. (RWJF Program Officers/Bazzarre, Kraft and Orleans)

5. **Do not focus on national policies at the expense of policy innovations in states and localities.** States and communities have extensive authority to set policies in areas such as school construction, park features and urban development. *Active Living Research* could learn from the tobacco-control movement, in which states and communities effectively changed policies that could not easily be changed at the national level. (Evaluators/Beery and Green, Group Health)

LOOKING AHEAD

Consistent with RWJF's goal of reversing the epidemic of childhood obesity by 2015, since October 2007, when the Board of Trustees reauthorized the program, *Active Living Research* has been focusing on research to identify environmental factors and policies that influence activity among children and the families and communities in which they live. The research will primarily focus on children at greatest risk for obesity, including ethnic minorities and children living in low-income communities. Sallis continues in his leadership role as director of the national program office for *Active Living Research* at San Diego State University.

Active Living Research sent out its Round 9 CFPs in the spring of 2009.

Report prepared by: Mary Nakashian
Reviewed by: Mary B. Geisz and Molly McKaughan
Program Officers: M. Katherine Kraft, Terry Bazzarre and C. Tracy Orleans

APPENDIX 1

Seminars Sponsored or Supported by Active Living Research

(Current as of the time of the grant; provided by the grantee organization; not verified by RWJF.)

- **August 2003:** A three-day seminar about active living research for 17 people from the fields of leisure studies and landscape architecture.
- **October 2004:** A seminar at the Annual Meeting of the Association for Public Policy Analysis and Management (APPAM); it encouraged policy-makers to apply for *Active Living Research* grants and to identify policy-relevant research agendas.
- **November 2004:** A dinner discussion for invited members of the Built Environment Institute, an institute of the American Public Health Association.
- **April 2005:** A seminar for members of the Society of Behavioral Medicine to help them prepare policy research grant proposals.
- **April 2005:** A seminar about physical activity for members of the Environmental Design Research Association (EDRA); it focused on measurement techniques and a literature review.
- **October 2005:** A seminar for members of the National Recreation and Park Association (NRPA); it presented researchers from university programs for parks and recreation and allied fields with research methods and techniques that likely were unfamiliar to them.
- **April and June 2005:** Training for professionals to observe physical activity in a variety of settings using SOPARC (System for Observing Play and Recreation in Communities) and SOPLAY (System for Observing Play and Leisure Activity in Youth); training made them able to train others in these tools.
- **December 2005:** A second seminar for members of the Built Environment Institute during the American Public Health Association annual meeting. Participants discussed actions the Institute might take in redeveloping areas affected by Hurricane Katrina.
- **April 2006:** Seminar sessions and a keynote presentation by James F. Sallis, Ph.D., the national program director, for attendees at the International Congress on Physical Activity and Public Health, in Atlanta.
- **May 2006:** A seminar at the annual meeting of the Environmental Design Research Association regarding new developments and new opportunities in active living research.

- **October 2006:** A session at the 2006 National Recreation and Park Association annual conference; it featured presentations about three parks and *Active Living Research* studies followed by breakout sessions to discuss the research findings.
- **October 2006:** A seminar entitled "Promotion of Physical Activity through Ecologic Recreation Modes" at a conference convened by the Cooper Institute in Dallas; it emphasized frameworks for strengthening the relationship between parks and recreation and public health.
- **October 2006:** Travel to the Cooper Institute, Dallas, as part of a professional development program for a Diversity Partnership grantee.
- **November 2006:** A reception for 50 people attending the Association of Collegiate Schools of Planning (ACSP) annual conference to talk about the future of active living research in the field of urban planning.
- **October 2007:** A seminar to help expand the skills of NAASO, The Obesity Society investigators interested in environment and obesity; it focused on utilizing GIS-based research and methods in studying environmental determinants of obesity.
- **December 2007:** A focus group at the Making Data Count: Measuring Diabetes and Obesity Conference in the Indian Health System conference. The goals of the focus group were to give attendees information about *Active Living Research's* projects and to solicit their input on research priorities for Native Americans.
- **March 2008:** A seminar at the American Educational Research Association (AERA) annual meeting in New York City, entitled "Policy Research on Schools and Physical Activity: Expanding the Active Living Research Field." It allowed *Active Living Research* grantees to present current research on school environments, physical education policy and law, and children's physical activity.
- **May 2008:** A panel entitled "Inequalities in Resources and Environments for Active Living" composed of *Active Living Research* grantees was organized for the State of Environmental Justice in America Conference in Washington. The goal of this panel was to raise awareness of obesity and physical activity as environmental justice issues, to encourage the formation of interdisciplinary research collaborations and to share information about the *Active Living Research* program and its funding opportunities.

APPENDIX 2

Findings from Selected Studies

(Current as of the time of the grant; provided by the grantee organization; not verified by RWJF.)

- **Brian Saelens and other researchers at the Cincinnati Children's Hospital Medical Center in Cleveland developed the environmental assessment of public**

recreation spaces (EAPRS), a tool measuring physical environments of parks and playgrounds. They found the tool to be reliable in assessing parks' and playgrounds' physical environments. (Round 1 grant)

- **Karen Mumford at Emory University in Atlanta analyzed characteristics of frequent park users.** They found that more frequent park users were people who lived close to parks, walked to parks, were senior citizens and were dog walkers. (Round 2 grant)
- **Steven Kelder at the University of Texas Health Science Center at Houston analyzed the impact of state legislation requiring physical education in schools.** Preliminary findings include:
  - Schools averaged 177 to 192 minutes of weekly physical education in kindergarten to sixth grade. At this level, schools complied with the requirements of the legislation.
  - Strategies used to meet the requirements included daily physical education, activity during music, regular exercise in the morning and structured activities during recess. (Round 3 grant)
- **Christopher Coutts at the University of Michigan in Ann Arbor studied the effects of diversity of land use and physical activity on greenways.** He found:
  - Increasing the mix of land use surrounding a greenway trail resulted in an increase in the number of people engaged in multiple forms of physical activity on the greenway.
  - In areas with low population density, land-use mixture did not appear to influence the number of people engaged in physical activity on the greenway.
  - In areas with high population density, it is critical to have a high level of land-use mixture to increase the number of people using the greenway for activity. (Dissertation grant)
- **Abby King at Stanford University in Palo Alto, Calif., and collaborating researchers from five other universities, analyzed environmental influences on regular physical activity.** They found:
  - People who met national standards of 30 minutes of moderate-to-vigorous activity on most days reported living in neighborhoods with more attractive scenery and pleasant walking conditions than people who did not meet the activity standards.
  - People with few concerns about traffic safety increased their physical activity more in response to interventions than did people who had more traffic safety concerns. (Special Project grant)
- **Susan Handy and other researchers at the University of California, Davis, analyzed the role of residential location choice and walking behaviors.** They

found that residents of traditional neighborhoods walk substantially more than residents of suburban neighborhoods. (Special Project grant)

- **Kris Day and other researchers from the University of California, Irvine, evaluated the impacts of urban revitalization on crime and pedestrian safety in one neighborhood.** They found:
  - Perceived pedestrian safety for children was significantly higher following the revitalization. Number and speed of vehicles declined significantly and crossings at intersections increased after the revitalization.
  - Residents reported that they walked more often to the grocery store and found the street more pleasant for walking following the revitalization.
  - Fewer pedestrians were observed on the street following the revitalization. This may be due to the existence of better alternative gathering spaces that resulted.
  - Residents said they felt significantly more positive about their neighborhood following the revitalization. (Special Project grant)
- **Greg Norman at the University of California, San Diego created new tools to measure influences on youth activity.** These tools indicated:
  - The most frequent rules for children were: not going places alone, taking a cell phone with them, staying in contact and staying within sight (particularly for young children).
  - Newly identified supports included: availability of large fenced-off areas, choices of activities, adult supervision and peer interaction. (Special Project grant)

BIBLIOGRAPHY

(Current as of date of the report; as provided by the grantee organization; not verified by RWJF; items not available from RWJF.)

NATIONAL PROGRAM OFFICE

Book Chapters

Sallis JF and Orleans CT. "Ecological Models: Application to Physical Activity." In *Encyclopedia of Health and Behavior, Vol 1,* Anderson NB (ed). Thousand Oaks, CA: Sage Publications, 2004.

Articles

Sallis JF. "New Thinking on Older Adults' Physical Activity" (Commentary). *American Journal of Preventive Medicine,* 25(Suppl. 3ii): 110–111, 2003.

Sallis JF, Cervero RB, Ascher W, Henderson KA, Kraft MK and Kerr J. "An Ecological Approach to Creating More Physically Active Communities." *Annual Review of Public Health*, 27: 297–322, 2006. Available online.

Sallis JF, Frank LD, Saelens BE and Kraft MK. "Active Transportation and Physical Activity: Opportunities for Collaboration on Transportation and Public Health Research." *Transportation Research Part A: Policy and Practice*, 38(4): 249–268, 2004.

Sallis JF and Glanz K. "The Role of Built Environments in Physical Activity, Eating, and Obesity in Childhood." *The Future of Children*, 16(1): 89–108, 2006. Available online.

Sallis J, Kraft K and Linton LS. "How the Environment Shapes Physical Activity: A Transdisciplinary Research Agenda" (Commentary). *American Journal of Preventive Medicine*, 22: 208, 2002.

Sallis JF and Linton LS. "Leisure Research, Active Lifestyles, and Public Health" (Commentary). *Leisure Sciences*, 27: 353–354, 2005.

Journals

American Journal of Health Promotion: Special Issue: Active Living Research, 21(4)(Supplement), 2007. Available online. This supplement includes the following articles:

- Aytur SA, Rodríguez DA, Evenson KR, Catellier DJ and Rosamond WD. "Promoting Active Community Environments Through Land Use and Transportation Planning." 397–407. Available online.
- Coogan MA, Karash KH, Adler T and Sallis J. "The Role of Personal Values, Urban Form, and Auto Availability in the Analysis of Walking for Transportation." 363–370. Available online.
- Day K and Cardinal BJ. "Special Issue Editors' Notes: A Second Generation of Active Living Research." iv–vii. Available online.
- DeVries SL, Bakker I, vanMechelen W and Hopman-Rock M. "Determinants of Activity-friendly Neighborhoods for Children: Results From the SPACE Study." 312–316. Available online.
- Frank L, Kerr J, Chapman J and Sallis J. "Urban Form Relationships with Walk Trip Frequency and Distance among Youth." 305–311. Available online.
- Lee C. "Environment and Active Living: The Roles of Health Risk and Economic Factors." 293–304. Available online.
- Liu GC, Wilson JS, Qi R and Ying J. "Green Neighborhoods, Food Retail and Childhood Overweight: Differences by Population Density." 317–325. Available online.

- Loukaitou-Sideris A. "Crime Prevention and Active Living." 380–389. Available online. *(Commissioned paper)*
- Maibach E. "The Influence of the Media Environment on Physical Activity: Looking for the Big Picture." 351–362. Available online. *(Commissioned paper)*
- Nicoll G. "Spatial Measures Associated with Stair Use." 346–352. Available online.
- Reynolds KD, Wolch J, Byrne J, Chou CP, Feng G, Weaver S and Jerrett M. "Trail Characteristics as Correlates of Urban Trail Use." 335–345. Available online.
- Rundle A, Diez Roux AV, Freeman LM, Miller D, Neckerman KM and Weiss CC. "The Urban Built Environment and Obesity in New York City: A Multilevel Analysis." 326–334. Available online.
- Spengler JO, Young SJ and Linton LS. "Schools as a Community Resource for Physical Activity: An Analysis of Liability Issues." 390–396. Available online. *(Commissioned paper)*
- Tilt JH, Unfried TM and Roca B. "Using Objective and Subjective Measures of Neighborhood Greenness and Accessible Destinations for Understanding Walking Trips and BMI in Seattle, Washington." 371–379. Available online.

American Journal of Preventive Medicine: Active Living Research, 28(Suppl. 2): 2005. Available online. This supplement includes the following articles:

- Bedimo-Rung AL, Mowen AJ and Cohen DA. "The Significance of Parks to Physical Activity and Public Health: A Conceptual Model." 159–168. Available online.
- Boarnet MG, Anderson CL, Day K, McMillan T and Alfonzo M. "Evaluation of the California Safe Routes to School Legislation: Urban Form Changes and Children's Active Transportation to School." 134–140. Available online.
- Evenson KR, Herring AH and Huston SI. "Evaluating Change in Physical Activity with the Building of a Multi-Use Trail." 177–185. Available online.
- Frank LD, Schmid TL, Sallis JF, Chapman J and Saelens BD. "Linking Objectively Measured Physical Activity with Objectively Measured Urban Form: Findings from SMARTRAQ." 117–125. Available online.
- Gauvin L, Richard L, Craig CL, Spivock M, Riva M, Forster M, Laforest S, Laberge S, Fournel M-C, Gagnon H, Gagne S and Potvin I. "From Walkability to Active Living Potential: An "Ecometric" Validation Study." 126–133. Available online.
- Giles-Corti B, Broomhall MH, Knuiman M, Colllins C, Douglas K, Ng K, Lange A and Donovan RJ. "Increasing Walking: How Important Is Distance To, Attractiveness, and Size of Public Open Space?" 169–176. Available online.

- Godbey GC, Caldwell LL, Floyd M and Payne LL. "Contributions of Leisure Studies and Recreation and Park Management Research to the Active Living Agenda." 150–158. Available online. *(Commissioned paper)*
- Hoehner CM, Brennan Ramirez LK, Elliott M, Handy SL and Brownson RC. "Perceived and Objective Environmental Measures and Physical Activity among Urban Adults." 105–116. Available online.
- Jackson RJ. "Commentary on Active Living Research." 218–219. Available online.
- Powell KE. "Land Use, the Built Environment, and Physical Activity: A Public Health Mixture; A Public Health Solution." 216–217. Available online.
- Robinson TN and Sirard JR. "Preventing Childhood Obesity: A Solution-Oriented Research Paradigm." 194–201. Available online. *(Commissioned paper)*
- Sallis JF, Linton LS and Kraft MK. "The First Active Living Research Conference: Growth of a Transdisciplinary Field." 93–95. Available online. *(Commissioned paper)*
- Schilling J and Linton LS. "The Public Health Roots of Zoning: In Search of Active Living's Legal Genealogy." 96–104. Available online.
- Stokols D, Harvey R, Gress J, Fuqua J and Phillips K. "In Vivo Studies of Transdisciplinary Scientific Collaboration: Lessons Learned and Implications for Active Living Research." 202–213. Available online. *(Commissioned paper)*
- Sturm R. "Economics and Physical Activity: A Research Agenda." 141–149. Available online. *(Commissioned paper)*
- Vernez Moudon A. "Active Living Research and the Urban Design, Planning and Transportation Disciplines." 214–215. Available online.
- Zimring C, Joseph A, Nicoll GL and Tsepas S. "Influences of Building Design and Site Design on Physical Activity: Research and Intervention Opportunities." 186–193. Available online. *(Commissioned paper)*

American Journal of Preventive Medicine: Active Living in Diverse and Disadvantaged Communities, Theme Issue, 34(4): 2008. Available online. This special issue includes the following articles:

- Aytur SA, Rodríguez DA, Evenson KR and Catellier DJ. "Urban Containment Policies and Physical Activity: A Time-Series Analysis of Metropolitan Areas, 1990–2002." 320–332. Available online.
- Babey SH, Hastert TA, Hongjian Y and Brown ER. "Physical Activity Among Adolescents: When Do Parks Matter?" 345–348. Available online.

- Boehmer TK, Luke DA, Haire-Joshu DL, Bates HS and Brownson RC. "Preventing Childhood Obesity Through State Policy: Predictors of Bill Enactment." 333–340. Available online.
- Flores GR. "Active Living in Latino Communities." 369–370. Available online.
- Hong T and Farley TA. "Urban Residents' Priorities for Neighborhood Features: A Survey of New Orleans Residents After Hurricane Katrina." 353–356. Available online.
- Kirchner CE, Gerber EG and Smith BC. "Designed to Deter: Community Barriers to Physical Activity for People with Visual or Motor Impairments." 349–352. Available online.
- McDonald NC. "Critical Factors for Active Transportation to School Among Low-Income and Minority Students: Evidence from the 2001 National Household Travel Survey." 341–344. Available online.
- Nasar JL. "Assessing Perceptions of Environments for Active Living." 357–363. Available online.
- Pratt CA. "Findings from the 2007 Active Living Research Conference: Implications for Future Research." 366–368. Available online.
- Proctor DC. "The Power of Research: We Can Reverse the Childhood Obesity Epidemic." 364–365. Available online.
- Roman CG and Chalfin A. "Fear of Walking Outdoors: A Multilevel Ecologic Analysis of Crime and Disorder." 306–312. Available online.
- Spangler KJ. "Keeping Our Promise to America's Youth." 371–372. Available online.
- Wells NM and Yang Y. "Neighborhood Design and Walking: A Quasi-Experimental Longitudinal Study." 313–319. Available online.

Journal of Physical Activity and Health, 3(Suppl. 1): S1–S272, 2006. Available online. This supplement includes the following articles:

- Andreyeva T and Sturm R. "Physical Activity and Changes in Health Care Costs in Middle Age." S6–S19. Available online.
- Bedimo-Rung AL, Gustat J, Tompkins BJ, Rice J and Thomson J. "Development of a Direct Observation Instrument to Measure Environmental Characteristics of Parks for Physical Activity." S176–S189. Available online.
- Cohen DA, Ashwood S, Scott M, Overton A, Evenson KR, Voorhees CC, Bedimo-Rung A and McKenzie TL. "Proximity to School and Physical Activity Among Middle School Girls: The Trial of Activity for Adolescent Girls Study." S129–S138. Available online.

- Ewing R, Handy S, Brownson R, Clemente O and Winston E. "Identifying and Measuring Urban Design Qualities Related to Walkability." S223–S240. Available online.
- Forsyth A, Schmitz KH, Oakes JM, Zimmerman J and Koepp J. "Standards for [Built] Environmental Measurement Using GIS: Toward a Protocol for Protocols." S241–S257. Available online.
- Hanson S. "Active Living Research in Light of the TRB/IOM Report." S258–266. Available online.
- Heath GW, Brownson RC, Kruger J, Miles R, Powell KE, Ramsey LT and 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." S55–S76. Available online.
- Kraft MK, Sallis JF, Vernez Moudon A and Linton LS. "The Second Active Living Research Conference: Signs of Maturity." S1–S5. Available online.
- Lee C and Vernez Moudon V. "Correlates of Walking for Transportation or Recreation Purposes." S77–S98. Available online.
- Lindsey G, Han Y, Wilson J and Yang J. "Neighborhood Correlates of Urban Trail Use." S139–S157. Available online.
- McCann B. "Making Physical Activity Research Relevant to Policy Makers." S267–S272. Available online.
- McKenzie TL, Cohen DA, Sehgal A, Williamson S and Golinelli D. "System for Observing Play and Recreation in Communities (SOPARC): Reliability and Feasibility Measures." S208–S222. Available online.
- Norman GJ, Nutter SK, Ryan S, Sallis JF, Calfas KJ and Patrick K. "Community Design and Access to Recreational Facilities as Correlates of Adolescent Physical Activity and Body-Mass Index." S118–S128. Available online.
- Saelens BE, Frank LD, Auffrey C, Whitaker RC, Burdette HL and Colabianchi N. "Measuring Physical Environments of Parks and Playgrounds: EAPRS Instrument Development and Inter-rater Reliability." S190–S207. Available online.
- Schmid TL, Pratt M and Witmer L. "A Framework for Physical Activity Policy Research." S20–S29. Available online.
- Taylor W, Poston WSC, Jones L and Kraft MK. "Environmental Justice: Obesity, Physical Activity and Healthy Eating." S30–S54. Available online. *(Commissioned paper)*
- Troped PJ, Cromley EK, Fragala MS, Melly SJ, Hasbrouck H, Gortmaker SL and Brownson RC. "Development and Reliability and Validity Testing of an Audit Tool

for Trail/Path Characteristics: The Path Environment Audit Tool (PEAT)." S158–S175. Available online.

- Vernez Moudon A, Lee C, Cheadle AD, Garvin C, Johnson D, Schmid TL, Weathers RD and Lin L. "Operational Definitions of Walkable Neighborhood: Theoretical and Empirical Insights." S99–S117. Available online.

Journal of Health Politics, Policy and Law (Special Issue: Active Living, the Built Environment, and the Policy Agenda), 33(3): 2008. Available online. This special issue includes the following articles:

- Adler S, Dobson N, Perl Fox K and Weigand L. "Advocating for Active Living on the Rural-Urban Fringe: A Case Study of Planning in the Portland, Oregon, Metropolitan Area." 525–558. Available online.
- Ahrentzen S. "Sustaining Active-Living Communities over the Decades: Lessons from a 1930s Greenbelt Town." 429–453. Available online.
- Brown LD and Kraft MK. "Active Living as an Institutional Challenge: Lessons from the Robert Wood Johnson Foundation's 'Celebrate Fitness' Program." 497–523. Available online.
- Brown LD and Kraft MK. "Editors' Note: Active Living, the Built Environment, and the Policy Agenda." 371–386. Available online.
- Eyler AA, Brownson RC, Evenson KR, Levinger D, Maddock JE, Pluto D, Troped PJ, Schmid TL, Carnoske C, Richards KL and Steinman LE. "Policy Influences on Community Trail Development." 407–427. Available online.
- Hanson R and Young G. "Active Living and Biking: Tracing the Evolution of a Biking System in Arlington, Virginia." 387–406. Available online.
- Lees E, Salvesen D and Shay E. "Collaborative School Planning and Active Schools: A Case Study of Lee County, Florida." 595–615. Available online.
- Lopez R, Campbell R and Jennings J. "The Boston Schoolyard Initiative: A Public-Private Partnership for Rebuilding Urban Play Spaces." 617–638. Available online.
- Schilling J and Keyes SD. "The Promise of Wisconsin's 1999 Comprehensive Planning Law: Land-Use Policy Reforms to Support Active Living." 455–496. Available online.
- Siikamäki J and Wernstedt K. "Turning Brownfields into Greenspaces: Examining Incentives and Barriers to Revitalization." 559–593. Available online.

Planning, Special Section, 2007. A1–A12. The journal includes the following articles:

- Ahrentzen S. "Sustaining Smart Growth and Active Living: A Greenbelt Town and its Village Center, 70 Years Later." A-4.

- Birch E. "The Philadelphia Story—Updated: Public Policies to Encourage Downtown Living." A-2.
- Dobson N, Adler S, Perl Fox K and Weigand L. "Advocating for Active Living on the Rural-Urban Fringe." A-5
- Ewing R, Hofstra A and Lane R. "Traffic Calming Initiatives—Approaching the Tipping Point." A-7.
- Eyler AA, Brownson RC, Evenson KR, Levinger D, Maddock J, Pluto D and Troped P. "Developing Community Trails: Brainstorms and the Power of Public Policy." A-12.
- Fullillove M and Green L. "Street Violence or Physical Activity? A Community Decides." A-8.
- Lopez R. "Saving Boston's Public Schoolyards." A-10.
- Salvesen D, Lees E and Shay E. "Can Mega-Schools Be Tamed? Collaborative Planning in Lee County, Florida." A-9.
- Wernstedt K and Siikamaki J. "Active Living Through Converting Brownfields to Greenspace." A-6.
- Schilling J. "Wisconsin's 1999 Comprehensive Planning Law: Creating a State-Wide Plan That Encourages Active Living." A-3.
- Young G and Hanson R. "Promoting Bicycling in Three Metropolitan Washington Counties." A-11.

Survey Instruments

"Active Living Research Impact Survey." Active Living Research National Program Office, fielded online July–August, 2006.

World Wide Web Sites

www.activelivingresearch.org includes summaries of all funded grants and *Active Living Research* conferences. It also includes texts of articles appearing in journal supplements and special issues, the *Active Living Research* Research Summaries and Briefs, and general information about the field of active living.

Presentations and Testimony

Brian Saelens, James Sallis and Lawrence Frank. "Transportation Impacts on Human Health, Especially Physical Activity." Resource paper for *Environmental Research Needs in Transportation Conference,* March 21–23, 2002, Washington. Conference proceedings available online (page 243).

EVALUATIONS

Reports

Beery W, Ottoson J, Green LW, Sentner S, Cahill C, Greenwald H and Pearson D. *Final Report, Group Health Community Foundation's Evaluation of the Robert Wood Johnson Foundation Active Living Research Program.* Seattle: Group Health Community Foundation, 2007.

Gutman MA, Barker DC, Samples-Smart F and Morley C. *Evaluation of the Robert Wood Johnson's Active Living Research Initiative.* Cranbury, NJ: Gutman Research Associates, 2007.

FUNDED INVESTIGATORS

Current as of July 2008

Books

Hestenes L, DeBord K, Moore R, Cosco N and McGuinnis J. *Preschool Outdoor Environment Measurement Scale (POEMS).* Winston Salem, NC: Kaplan Co., 2005.

Book Chapters

Birch E. "Changing Place in the New Downtown." In *The New Downtown Princeton: Policy Research Institute for the Region*, September 2006.

Cosco N. "Preschool Outdoor Environments: An Emerging Opportunity for Children's Daily Active Living." In *Open Space: People Space*, Ward-Thompson C and Travlou P (eds). London: Routledge, 2007.

Gordon-Larsen P and Reynolds KD. "Influence of the Built Environment on Physical Activity and Obesity in Children and Adolescents." In *Handbook of Pediatric Obesity: Epidemiology, Etiology and Prevention,* Goran MI and Sothern MS (eds). Boca Raton, FL: Taylor & Francis, 2006.

Lee C and Zhu X. "School Transportation, Health, and Equity: The Role of Built Environments." Chapter 2, pp. 92–127. In *Transportation Research Trends,* Inweldi PO (ed). Hauppauge, NY: Nova Science Publishers, 2008.

McKoy D and Vincent JM. "Understanding the Housing-Schools Nexus: Integrating Housing and Educational Policy and Practice to Improve Neighborhoods and Schools." In *A History of Housing Discrimination: An Examination of Barriers and Efforts to Achieve an Inclusive Society,* Carr JH (ed). Washington: National Fair Housing Alliance, 2007.

Spruijt-Metz D, Berrigan D, Kelly LA, McConnell R, Dueker D, Linsdey G, Atienza AA, Michel S, Irwin ML, Wolch J, Jerrett M, Tatalovich Z and Redline S. "Measures of Physical Activity and Exercise." In *Handbook of Assessment Methods for Obesity and*

Eating Behaviors, Related Problems and Weight: Measures, Theory and Research (2nd edition), Allison DA (ed). Thousand Oaks, CA: Sage Publications Inc., 2008.

Vincent JM. "Public Schools as Public Infrastructure: Schools, Community, and Land Use Planning." In *Infrastructure Planning and Finance: A Guide for Local Practitioners,* Elmer V and Leigland A (eds). Point Arena, CA: Solano Press Books, 2008.

Articles

Ahrentzen S. "Sustaining Active-Living Communities over the Decades: Lessons from a 1930s Greenbelt Town." *Journal of Health Politics, Policy and Law,* 33(3): 429–453, 2008.

Aytur S. "Land Use and Transportation Planning to Promote Physical Activity in North Carolina." *Carolina Planning Journal,* 2006.

Aytur SA, Rodríguez DA, Evenson KR, Catellier DJ and Rosamond WD. "Promoting Active Community Environments through Land Use and Transportation Planning." *American Journal of Health Promotion,* 21(Suppl. 4): 397–407, 2007.

Aytur SA, Rodríguez DA, Evenson KR, Catellier DJ and Rosamond WD. "The Sociodemographics of Land Use Planning: Relationships to Physical Activity, Accessibility, and Equity." *Health and Place,* 14: 367–385, 2008.

Bedimo-Rung AL, Gustat J, Tompkins BJ, Rice J and Thomson J. "Development of a Direct Observation Instrument to Measure Environmental Characteristics of Parks for Physical Activity." *Journal of Physical Activity and Health,* 3(Suppl. 1): S176–S189, 2006.

Bedimo-Rung AL, Mowen AJ and Cohen DA. "The Significance of Parks to Physical Activity and Public Health: A Conceptual Model." *American Journal of Preventive Medicine,* 28(Suppl. 2): 159–168, 2005.

Bedimo-Rung AL, Thomson JL, Mowen AJ, Gustat J, Tompkins BJ and Strikmiller PK. "The Condition of Neighborhood Parks Following Hurricane Katrina: Development of a Post-Hurricane Assessment Instrument." *Journal of Physical Activity and Health,* 5(1): 45–57, 2008. Abstract available online. Full article requires journal subscription or fee.

Boarnet M, Day K, Alfonzo M, Forsyth A and Oakes JM. "The Irvine-Minnesota Inventory to Measure Built Environments: Reliability Tests." *American Journal of Preventive Medicine,* 30(2): 153–259, 2006.

Boehmer TK, Hoehner CM, Deshpande AD, Brennan Ramirez LK and Brownson RC. "Perceived and Observed Neighborhood Indicators of Obesity among Urban Adults." *International Journal of Obesity,* 31(6): 968–977, 2007. Abstract available online. Full text requires journal subscription or fee.

Boehmer TK, Hoehner CM, Wyrwich KW, Brennan Ramirez LK and Brownson RC. "Correspondence Between Perceived and Observed Measures of Neighborhood Environmental Supports for Physical Activity." *Journal of Physical Activity and Health,*

3(1): 22–36, 2006. Abstract available online. Full text requires journal subscription or fee.

Brennan Ramirez LK, Hoehner CM, Brownson RC, Cook R, Anderson MQ, Orleans CT, Hollander M, Barker DC, Bors P, Ewing R, Killingsworth R, Petersmarck K, Schmid T and Wilkinson B. "Indicators of Activity-Friendly Communities: An Evidence-Based Consensus Development Process." *American Journal of Preventive Medicine,* 31(6): 515–524, 2006. Abstract available online. Full text requires journal subscription or fee.

Brownson RC, Royer C, Ewing R and McBride TD. "Researchers and Policymakers: Travelers in Parallel Universes." *American Journal of Preventive Medicine,* 30(2): 164–172, 2006. Abstract available online. Full text requires journal subscription or fee.

Brownson RC, Hoehner CM, Brennan LK, Cook R, Elliott M and McMullen K. "Reliability of Two Instruments for Auditing the Environment for Physical Activity." *Journal of Physical Activity and Health,* 1: 191–208, 2004.

Chang VW, Hilliler AE, Mehta NK and Smith TE. "Neighborhood Disorder, Crime, and the Risk of Obesity." *Social Forces,* 87(4): 2063–2092, June 1, 2009.

Clifton K, Ewing R, Knapp G and Song Y. "Quantitative Analysis of Urban Form: A Multidisciplinary Review." *Journal of Urbanism,* 1: 17–45, 2008.

Clifton K, Livi A and Rodríguez DA. "The Development and Testing of an Audit for the Pedestrian Environment." *Landscape & Urban Planning,* 80(1–2): 95–110, 2007.

Coutts C. "Greenway Accessibility and Physical Activity Behavior." *Environment and Planning B,* 35(3): 552–563, 2008.

Coutts C. "Multiple Case Studies of the Influence of Land Use Type on the Distribution of Uses along Urban River Greenways." *Journal of Urban Planning and Development,* 135(1): 31–38, March 2009.

Cradock A, Melly S, Allen J, Morris J and Gortmaker S. "Characteristics of School Campuses and Physical Activity Among Youth." *American Journal of Preventive Medicine,* 33(2): 106–113, 2007. Abstract available online. Full text requires journal subscription or fee.

Cronan MK, Shinew KJ and Stodolska M. "Trail Use Among Latinos: Recognizing Diverse Uses Among a Specific Population." *Journal of Park and Recreation Administration,* 26: 62–86, 2008.

Day, K, Anderson C, Powe M, McMillan T and Winn D. "Remaking Minnie Street: The Impacts of Urban Revitalization on Crime and Pedestrian Safety." *Journal of Planning Education and Research,* 26(3): 315–331, 2007. Abstract available online.

Day K, Boarnet M, Alfonzo M and Forsyth A. "The Irvine-Minnesota Inventory to Measure Built Environments: Development." *American Journal of Preventive Medicine,* 30(2): 144–152, 2006. Abstract available online. Full text requires journal subscription or fee.

Dill J and Voros K. "Factors Affecting Bicycling Demand: Initial Survey Findings from the Portland Region." *Transportation Research Record: Journal of the Transportation Research Board,* 2031: 9–17, 2007.

Dunton GF, Spruijt-Metz D, Wolch JR, Chou C, Jerrett M, Byrne JA, Weaver SH and Reynolds KD. "Reasons for Urban Trail Use Predict Levels of Trail-Related Physical Activity." *Journal of Physical Activity and Health,* 6(4): 426–434, 2009.

Eyler AA, Brownson RC, Evenson KR, Levinger D, Maddock JE, Pluto D, Troped, PJ, Schmid TL, Carnoske C, Richards KL and Steinman LE. "Policy Influences on Community Trail Development." *Journal of Health Politics, Policy and Law,* 33(3): 407–427, 2008.

Ewing R. "Traffic Calming in the United States: Is the U.S. Following Europe's Lead?" *Urban Design International,* 13: 90–104, Summer 2008.

Ewing R, Handy S, Brownson R, Clemente O and Winston E. "Identifying and Measuring Urban Design Qualities Related to Walkability." *Journal of Physical Activity and Health,* 3(Suppl. 1): S223–S240, 2006.

Floyd MF, Spengler JO, Maddock JE, Gobster PH and Suau L. "Park-Based Physical Activity in Diverse Communities of Two US Cities: An Observational Study." *American Journal of Preventive Medicine,* 34(4), 299–305, 2008.

Floyd MF, Spengler JO, Maddock JE, Gobster PH and Suau L. "Environmental and Social Correlates of Physical Activity in Neighborhood Parks: An Observational Study in Tampa and Chicago." *Leisure Sciences,* 30(4): 360–375, 2008.

Forman H, Kerr J, Norman G, Saelens B, Durant N, Harris S and Sallis J. "Reliability and Validity of Destination-Specific Barriers to Walking and Cycling for Parents and Adolescents." *Preventive Medicine,* 46(4): 311–316, 2008. Abstract available online.

Forsyth A, Oakes JM and Schmitz KH. "Does Residential Density Increase Walking and Other Physical Activity?" *Urban Studies,* 44(4): 679–697, 2007. Abstract available online. Full text requires journal subscription or fee.

Forsyth A, Schmitz KH, Oakes JM, Zimmerman J and Koepp J. "Standards for [Built] Environmental Measurement using GIS: Toward a Protocol for Protocols." *Journal of Physical Activity and Health,* 3(Suppl. 1): S241–S257, 2006.

Frank L, Kerr J, Chapman J and Sallis J. "Urban Form Relationships with Walk Trip Frequency and Distance Among Youth." *American Journal of Health Promotion,* 21(Suppl. 4): 305–311, 2007.

Frank LD, Sallis JF, Conway TL, Chapman JE, Saelens BE and Bachman W. "Many Pathways from Land Use to Health: Associations Between Walkability and Active Transportation, Body Mass Index, and Air Quality." *Journal of the American Planning Association,* 71(1): 75–87, 2006.

Granner ML and Sharpe PA. "Monitoring Physical Activity: Uses and Measurement Issues with Automated Counters." *Journal of Physical Activity and Health,* 1(2): 131–141, 2004. Abstract available online. Full text requires journal subscription or fee.

Grow HM, Saelens BE, Kerr J, Durant NH, Norman GJ and Sallis JF. "Where Are Youth Active? Roles of Proximity, Active Transport, and Built Environment." *Medicine & Science in Sports & Exercise,* 40(12): 2071–2079, 2008. Available online.

Handy S, Sallis J, Weber D, Maibach E and Hollander M. "Is Support for Traditionally Designed Communities Growing? Evidence from Two National Surveys." *Journal of the American Planning Association,* 74(2): 209–221, 2008.

Handy S, Cao X and Mokhtarian P. "The Causal Influence of Neighborhood Design on Physical Activity Within the Neighborhood: Evidence from Northern California." *American Journal of Health Promotion,* 22(5): 350–358, 2008. Abstract available online.

Handy S, Cao X and Mokhtarian P. "Self-Selection in the Relationship Between the Built Environment and Walking: Evidence from Northern California." *Journal of the American Planning Association,* 72(1): 55–74, 2006. Abstract available online. Full text requires journal subscription or fee.

Hanson R and Young G. "Active Living and Biking: Tracing the Evolution of a Biking System in Arlington, Virginia." *Journal of Health Politics, Policy and Law,* 33(3): 387–406, 2008.

Harris-Kojetin L, Kiefer K, Joseph A and Zimring C. "Encouraging Physical Activity Among Retirement Community Residents—The Role of Campus Commitment, Programming, Staffing, Promotion, Financing and Accreditation." *Seniors Housing & Care Journal,* 13(1): 3–20, 2005. Abstract available online.

Hoehner CM, Brennan LK, Brownson RC, Handy SL and Killingsworth R. "Opportunities for Integrating Public Health and Urban Planning Approaches to Promote Active Community Environments." *American Journal of Health Promotion,* 18(1): 14–20, 2003. Abstract available online.

Hoehner CM, Brennan Ramirez LK, Elliott MB, Handy SL and Brownson RC. "Perceived and Objective Environmental Measures and Physical Activity among Urban Adults." *American Journal of Preventive Medicine,* 28(2S2): 105–116, 2005.

Hoehner CM, Ivy A, Brennan Ramirez LK, Handy SL and Brownson RC. "Active Neighborhood Checklist: A User-Friendly and Reliable Tool for Assessing Activity-Friendliness." *American Journal of Health Promotion,* 21(6): 534–537, 2007. Abstract available online.

Hoehner CM, Ivy A, Brennan Ramirez LK, Meriwether B and Brownson RC. "How Reliably Do Community Members Audit the Neighborhood Environment for Its Support of Physical Activity? Implications for Participatory Research." *Journal of Public Health Management and Practice,* 12(3): 270–277, 2006. Abstract available online. Full text requires subscription or fee.

Jago R, Baranowski T and Baranowski J. "Observed, GIS and Self-Reported Environmental Features and Adolescent Physical Activity." *American Journal of Health Promotion,* 20(6): 422–428, 2006. Abstract available online.

Jago R, Baranowski T, Baranowski JC, Cullen KW and Thompson D. "Distance to Food Outlets and Male Adolescent Fruit and Vegetable Consumption: Mediation Effects." *International Journal of Behavioral Nutrition & Physical Activity,* 4(35): 1–10, 2007.

Jago R, Baranowski T and Harris M. "Relationships Between GIS Environmental Features and Adolescent Male Physical Activity: GIS Coding Differences." *Journal of Physical Activity & Health,* 3(2): 230–242, 2006. Abstract available online. Full text requires journal subscription or fee.

Jago R, Baranowski T, Zakeri I and Harris M. "Observed Environmental Features and the Physical Activity of Adolescent Males." *American Journal of Preventive Medicine,* 29(2): 98–104, 2005. Abstract available online.

Joseph A and Zimring C. "Where Active Older Adults Walk: Understanding the Factors Related to Path Choice for Walking among Active Retirement Community Residents." *Environment and Behavior,* 39(1): 75–105, 2007. Abstract available online. Full text requires journal subscription or fee.

Kerr J, Frank L, Sallis JF and Chapman J. "Urban Form Correlates of Pedestrian Travel in Youth: Differences by Gender, Race-Ethnicity, and Household Attributes." *Transportation Research—Part D,* 12(3): 177–182, 2007. Abstract available online.

King AC, Toobert D, Ahn D, Resnicow K, Coday M, Riebe D, Garber CE, Hurtz S, Morton J and Sallis JF. "Perceived Environments as Physical Activity Correlates and Moderators of Interventions in Five Studies." *American Journal of Health Promotion,* 21(1): 24–35, 2006. Abstract available online.

King D."Neighborhood and Individual Factors in Activity in Older Adults: Results from the Neighborhoods and Senior Health Study." *Journal of Aging and Physical Activity,* 16(2): 144–70, 2008.

Kirchner CE, Gerber EG and Smith BC. "Designed to Deter: Community Barriers to Physical Activity for People with Visual or Motor Impairments." *American Journal of Preventive Medicine,* 34(4), 349–352, 2008.

Lee C. "Environment and Active Living: The Roles of Health Risk and Economic Factors." *American Journal of Health Promotion,* 21(Suppl. 4): 293–304, 2007.

Lee C and Moudon AV. "Correlates of Walking for Transportation or Recreation Purposes." *Journal of Physical Activity and Health*, 3(Suppl. 1): S77–S98, 2006.

Lee RE, Booth KM, Reese-Smith J, Regan GR and Howard HH. "The Physical Activity Resource Assessment (PARA) Instrument: Evaluating Features, Amenities and Incivilities of Physical Activity Resources in Urban Neighborhoods." *International Journal of Behavioral Nutrition and Physical Activity,* 2(13), published online 2005. Available online.

Lees E, Salvesen D and Shay E. "Collaborative School Planning and Active Schools: A Case Study of Lee County, Florida. *Journal of Health Politics, Policy and Law,* 33(3): 595–615, 2008.

Lindsey G, Han Y, Wilson J and Yang J. "Neighborhood Correlates of Urban Trail Use." *Journal of Physical Activity and Health,* 3(Suppl. 1): S139–S157, 2006.

Lindsey P and Lindsey G. "Using Pedestrian Count Models to Estimate Urban Trail Traffic." *Journal of Regional Analysis and Policy,* 34(1): 52–68, 2004. Available online.

Lindsey G, Wilson J, Yang JA and Alexa C. "Urban Greenways, Trail Characteristics and Trail Use: Implications for Design." *Journal of Urban Design,* 13(1): 53–79, 2008. Abstract available online.

Lindsey G, Wilson J, Rubchinskaya E, Yang J and Han Y. "Estimating Urban Trail Traffic: Methods for Existing and Proposed Trails." Landscape and Urban Planning, 81(5): 299–315, 2007. Abstract available online. Full text requires subscription or fee.

Lopez R, Campbell R and Jennings J. "The Boston Schoolyard Initiative: A Public Private Partnership for Rebuilding Urban Play Spaces." *Journal of Health Politics, Policy and Law,* 33(3): 617–638, 2008. Available online.

McDonald N. "Active Transportation to School: Trends Among U.S. Schoolchildren, 1969-2001." *American Journal of Preventive Medicine,* 32(6): 509–516, 2007. Abstract available online.

McDonald N. "Critical Factors for Active Transportation to School Among Low-Income and Minority Students: Evidence from the 2001 National Household Travel Survey." *American Journal of Preventive Medicine,* 34(4): 341–344, 2008.

McDonald N "Children's Mode Choice for the School Trip: The Role of Distance and School Location in Walking to School." *Transportation,* 35(1): 23–35, 2008.

McDonald N. "Exploratory Analysis of Children's Travel Patterns." *Transportation Research Record: Journal of the Transportation Research Board,* 1977: 1–7, 2006. Available online.

McKoy D and Vincent J. "The Center for Cities & Schools: Connecting Research and Policy Agendas." *Berkeley Planning Journal,* 18(1): 57–77, 2005.

McKoy D and Vincent JM. "Engaging Schools in Urban Revitalization: The YPLAN (Youth-Plan, Learn, Act, Now!)." *Journal of Planning Education and Research,* 26(4): 389–403, 2007. Abstract available online. Full text requires journal subscription or fee.

Moore R and Cosco N. "Greening Montessori School Grounds by Design." *NAMTA (North American Montessori Teachers Association) Journal,* 32(Part 1): 129–152, 2007.

Nelson MC and Gordon-Larsen P. "Physical Activity and Sedentary Behavior Patterns are Associated with Selected Adolescent Health Risk Behaviors." *Pediatrics,* 117(4): 1281–1290, 2006. Available online.

Nelson MC, Gordon-Larsen P, Adair LS and Popkin BM. "Adolescent Physical Activity and Sedentary Behavior: Patterning and Long-Term Maintenance." *American Journal of Preventive Medicine,* 28(3): 259–266, 2005. Abstract available online.

Nelson MC, Gordon-Larsen P, Song Y and Popkin BM. "Built and Social Environments: Associations with Adolescent Overweight and Activity." *American Journal of Preventive Medicine,* 31(2): 109–117, 2006. Abstract available online.

Nicoll G. "Spatial Measures Associated with Stair Use." *American Journal of Health Promotion,* 21(Suppl. 4): 346–352, 2007.

Oakes JM, Forsyth A and Schmitz KH. "The Effects of Neighborhood Density and Street Connectivity on Walking Behavior: The Twin Cities Walking Study." *Epidemiologic Perspectives & Innovations,* 4: 16, 2007. Available online.

Ottensmann JR and Lindsey G. "A Use-Based Measure of Accessibility to Linear Features to Predict Urban Trail Use." *Journal of Transport and Land Use,* 1(1): 41–63, 2008. Abstract and article available online.

Reynolds KD, Wolch J, Byrne J, Chou CP, Feng G, Weaver S and Jerrett M. "Trail Characteristics as Correlates of Urban Trail Use." *American Journal of Health Promotion,* 21(Suppl. 4): 335–345, 2007.

Ries AV, Gittelsohn J, Voorhees CC, Roche K, Clifton KJ and Astone N. "The Environment and Urban Adolescents' Use of Recreational Facilities for Physical Activity: A Qualitative Study." *American Journal of Health Promotion,* 23(1): 43–50, 2008.

Ries AV, Voorhees CC, Gittelsohn J, Roche K and Astone N. "Adolescents' Perceptions of Environmental Influences on Physical Activity." *American Journal of Health Behavior,* 32(1), 26–39, 2008.

Rodríguez D, Aytur SA, Oakes M, Forsyth D and Clifton K. "Relation of Modifiable Attributes to Walking." *Preventive Medicine,* 47(3): 260–264, September 2008. Epub, March 10, 2008.

Rodríguez DA, Targa F and Aytur S. "Transportation Implications of Urban Containment Policies: A Study of the Largest Twenty-five U.S. Metropolitan Areas." *Urban Studies,* 43(10): 1879–1897, 2006. Abstract available online. Full text requires journal subscription or fee.

Saelens BE, Frank LD, Auffrey C, Whitaker RC and Burdette HL. "Measuring Physical Environments of Parks and Playgrounds: EAPRS Instrument Development and Inter-Rater Reliability." *Journal of Physical Activity and Health,* 3(Suppl. 1): S190–S207, 2006.

Salvesen D, Evenson KR, Rodríguez D and Brown A. "Factors Influencing Implementation of Local Policies to Promote Physical Activity: A Case Study of Montgomery County, Maryland." *Journal of Public Health Management and Practice,* 14(3): 280–288, 2008. Abstract available online.

Schilling J and Keyes SD. "The Promise of Wisconsin's 1999 Comprehensive Planning Law: Land-use Policy Reforms to Support Active Living." *Journal of Health Politics, Policy and Law,* 33(3): 455–496, 2008.

Schwartz M, Aytur SA, Evenson KR and Rodríguez DA. "Are Perceptions about Worksite Neighborhoods and Policies Associated with Walking?" *American Journal of Health Promotion,* 24(2): 146–151, 2009.

Siikamäki J and Wernstedt K. "Turning Brownfields into Greenspaces: Examining Incentives and Barriers to Revitalization." *Journal of Health Politics, Policy and Law,* 33(3): 559–593, 2008.

Skowron M, Stodolska M and Shinew KJ. "Determinants of Leisure Time Physical Activity Participation Among Latina Women." *Leisure Sciences,* 30(5): 429-447, 2008.

Strath SJ, Isaacs RF and Greenwald MJ. "Operationalizing Environmental Indicators for Influencing Physical Activity in the Elderly." *Journal of Physical Activity & Aging,* 15(4): 412–424, 2007.

Troped PJ, Cromley EK, Fragala MS, Melly SJ, Hasbrouck HH, Gortmaker SL and Brownson RC. "Development and Reliability and Validity Testing of an Audit Tool for Trail/Path Characteristics: The Path Environment Audit Tool (PEAT)." *Journal of Physical Activity and Health,* 3(Suppl. 1): S158–S175, 2006.

Troped PJ, Oliveira MS, Matthews CE, Cromley EK, Melly SJ and Craig B. "Prediction of Activity Mode with Global Positioning System and Accelerometer Data." *Medicine and Science in Sports and Exercise, 40*(5): 972–978, 2008. Abstract available online. Full text requires journal subscription or fee.

Vincent JM and Filardo M. "School Construction and Renovation Spending: Who's Benefiting?" *Educational Facility Planner,* 42(1): 26–30, 2007.

Vincent JM. "Public Schools as Public Infrastructure: Schools, Community, and Land Use Planning." *Journal of Planning Education and Research,* 25(4): 433–437, 2006. Abstract available online. Full text requires journal subscription or fee.

Wells NM and Yang Y. "Neighborhood Design and Walking: A Quasi-Experimental Longitudinal Study of Low-Income Southern Women Moving to Neotraditional or Suburban Neighborhoods." *American Journal of Preventive Medicine,* 34(4): 313–319, 2008. Abstract available online.

Wilbur J, McDevitt J, Wang E, Dancy B, Briller J, Ingram D, Nicola T, Lee H and Zenk S. "Recruitment of African American Women to a Walking Program: Eligibility, Ineligibility, and Attrition During Screening." *Research in Nursing and Health,* 29(3): 176–187, 2006. Abstract available online.

Wilson J, Lindsey G and Liu, G. "Viewshed Characteristics of Urban Pedestrian Trails, Indianapolis, Indiana, USA." *Journal of Maps,* 108–118, 2008.

Xingyou Z, Christoffel KK, Mason M and Lin L. "Identification of Contrastive and Comparable School Neighborhoods for Childhood Obesity and Physical Activity

Research." *International Journal of Health Geographics*, 5(14): published online March 2006. Available online.

Zenk SN, Wilbur J, Wang E, McDevitt J, Block R, McNeil S, Oh A and Savar N. "Neighborhood Environment and Adherence to a Walking Intervention in African-American Women." *Health Education and Behavior,* 36(1): 167–181, 2009. Epub, July 31, 2008.

Zhu X and Lee C. "Walkability and Safety around Elementary Schools: Economic and Ethnic Disparities." *American Journal of Preventive Medicine,* 34(4): 282–290, 2008.

Zimring C, Joseph A, Nicoll G and Tsepas S. "Influences of Building Design and Site Design on Physical Activity Research and Intervention Opportunities." *American Journal of Preventive Medicine,* 28(2): 186–193, 2005.

Reports

Birch E. *Changing Place in the New Downtown.* Princeton, NJ: Policy Research Institute for the Region, Woodrow Wilson School of Public and International Affairs, Princeton University, 2006.

Cosco N, Thigpen B, Moore R, O'Brien M and Mendel C. *Head Start Growth and Readiness in the Outdoor World (HS-GROW): Linking Research to Practice.* Washington: Head Start Bureau, 2004.

Cromley EK, Troped J, Melly SJ and Huffman FT. *Community Trails in Community Context: GIS Analysis of Associations between Trail and Neighborhood Characteristics.* Storrs, CT: University of Connecticut Center for Geographic Information and Analysis, 2008. Available online.

Ewing R. *U.S. Traffic Calming Manual.* Chicago/Washington and Reston, VA: American Planning Association/American Society of Civil Engineers, 2009.

Filardo M, Vincent J, Sung P and Stein T. *Growth and Disparity: A Decade of U.S. Public School Construction.* Washington: BEST (Building Educational Success Together), 2006. Available online.

Lopez R, Campbell R and Jennings J. *Schoolyard Improvements and Standardized Test Scores: An Ecological Analysis.* (Research Brief). Boston: Mauricio Gaston Institute for Latino Community Development and Public Policy, University of Massachusetts, Boston, 2008. Available online.

Melly SJ, Craddock AL and Gortmaker SL. *Environments Around Schools and Physical Activity: GIS Protocols.* Boston: Harvard Prevention Research Center, January 2007.

Moore R and Cosco N. *Well-Being by Nature: Therapeutic Gardens for Children.* Landscape Architecture Technical Information Series (LATIS) Forum on Therapeutic Garden Design. Therapeutic Gardens in Healthcare Settings, 2006. Washington: American Society of Landscape Architects (online resource).

Rubchinskaya EL, Lindsey G and Wilson, J. *Many Marion County Residents Use Indianapolis Greenways.* Indianapolis: Indiana University Public Policy Institute, Center for Urban Policy and the Environment, 2008. Available online.

PROFILE LIST

Myron F. Floyd, Ph.D. (February 2008)
Professor, Department of Parks, Recreation and Tourism Management
College of Natural Resources
North Carolina State University
Raleigh, N.C.

Janice Johnson Dias, Ph.D., M.A. (December 2010)
Assistant Professor, John Jay College of Criminal Justice
City University of New York
New York, N.Y.

Robin Moore, Dipl.Arch., M.C.P. (December 2010)
Professor, College of Design
North Carolina State University
Raleigh, N.C.

Melissa Nelson, Ph.D., R.D. (February 2008)
Assistant Professor, Department of Epidemiology and Community Health
University of Minnesota
Minneapolis, Minn.

Amy Vastine Ries, Ph.D., M.H.S. (February 2008)
Fellow
Centers for Behavioral and Preventive Medicine
Brown University
Providence, R.I.

Jeffrey M. Vincent, Ph.D. (February 2008)
Co-Founder and Deputy Director
Center for Cities and Schools
University of California at Berkeley
Berkeley, Calif.

PROJECT LIST

The Boston Schoolyard Initiative: A Study of Its Schoolyard Renovations (October 2008)
Boston University School of Public Health

Boston, Mass.

Assessing an Effort to Promote Safe Parks, Streets and Schools in Washington Heights/Inwood (October 2008)
Mailman School of Public Health at Columbia University
New York, N.Y.

Women Who Walk: Study Looks at the Impact of Neighborhood Design (October 2008)
Cornell University College of Human Ecology
Ithaca, New York

Getting Middle-School Students Up and Moving: What's the Role of School and Neighborhood Environments...and the Weather (October 2008)
Harvard University School of Public Health
Boston, Mass.

How Do Latinos in and Around Chicago Use Parks, Trails and Sports Facilities? (October 2008)
University of Illinois at Urbana-Champaign College of Applied Life Studies
Champaign, Ill.

Tracking and Analyzing Trail Use in Indianapolis (October 2008)
Indiana University School of Public and Environmental Affairs
Bloomington, Ind.

We Are Where We Live: How Neighborhood Disorder and Crime Impact Physical Activity, Weight and Racial Disparities in Health (October 2008)
University of Pennsylvania School of Medicine
Philadelphia, Pa.