Active Living Research
A National Program Report

EXECUTIVE SUMMARY

Active Living Research is a Robert Wood Johnson Foundation (RWJF) national program that promotes healthy living by identifying environmental factors and policies that can increase physical activity and by sharing this evidence with policymakers to help them create activity-friendly communities. Active Living Research’s vision is to make being physically active a part of daily life and normal routine.

The program has three core objectives:

- To build an evidence base of active living research
- To recruit and nurture a multidisciplinary and diverse cadre of active living researchers of all ages
- To inform policy and practice

While consistently pursuing these objectives, Active Living Research has also evolved—focusing on children’s physical activity since 2007 to support the RWJF goal of reversing the childhood obesity epidemic, concentrating on disseminating actionable evidence in response to policymaker needs, and, in 2014, supporting RWJF’s new vision of a building a Culture of Health.

The program has issued 260 grants to researchers from 31 disciplines who have developed 173 new active living tools and measures, published findings in nearly 400 journal articles, and made research contributions that resulted in 32 local or statewide policy changes. RWJF invested $32.9 million in the program from August 2001 through the end of January 2014. An additional grant supports accelerating use of credible evidence to drive
childhood obesity prevention and strengthen the growing field of active living research and runs through January 2016.¹

**CONTEXT**

Physical inactivity is an important modifiable threat to health. Despite the well-documented benefits of physical activity, however, few American meet the federal government's physical activity guidelines. Only 20 percent of adults meet both the aerobic and muscle-strengthening recommendations. Fewer than half (42%) of children ages 6 to 11 engage in 60 minutes or more of moderate-to-vigorous physical activity five or more days per week, a figure that drops to 8 percent for adolescents ages 12 to 15.²

Sedentary lifestyles are a major contributor to the obesity epidemic that jeopardizes the futures of millions of adults and children in the United States. Among adults, more than two-thirds (68.7%) are either overweight or obese. Among children ages 2 to 19, some 17 percent are obese, and 32 percent are overweight or obese, according to the 2008 National Health and Nutrition Examination Survey. This translates to more than 23 million children and adolescents who are either obese or overweight.

Early studies on physical activity, health, and obesity focused on the individual’s responsibility for his or her own behavior. By the end of the 1990s, however, research began pointing to environmental factors and public policy as playing important roles in promoting or inhibiting active lifestyles.

**RWJF’s Interest in This Area**

The Robert Wood Johnson Foundation (RWJF) has used its grantmaking resources to contribute to the knowledge base about the policy and environmental factors shaping individual- and population-level health behaviors, not just relating to obesity but also, in particular, to tobacco. It gave priority to research studies that produced actionable evidence that policymakers and practitioners could use to promote change in their communities, and it actively engaged relevant stakeholders in defining research needs and dissemination channels.

National programs such as *Tobacco Policy Research and Evaluation* (see the [Program Results Report](#)) and *Bridging the Gap: Research Informing Practice and Policy for Healthy Youth Behavior* explored how policy and environmental factors, such raising

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¹ ID 71566 ($1,750,000, February 1, 2014 to January 31, 2016)
tobacco taxes, affected tobacco use and youth decision-making about smoking.\(^3\) Advocacy initiatives, like the Campaign for Tobacco-Free Kids, then used such findings to help build the case for policy change to reduce youth access to tobacco.

**RWJF’s Response to the Obesity Epidemic**

As evidence began to mount about obesity’s toll on the health of Americans, RWJF made addressing the epidemic one of its priorities, committing $500 million to achieving the goal of reversing the rise in childhood obesity by 2015. The Foundation adapted evidence and implementation strategies from its programs on tobacco and substance use to this new area. Active Living Research, launched in 2001, was one of a portfolio of programs that focused on promoting physical activity among adults and children, and creating more active communities where exercise could be part of a daily routine. The Foundation placed a special emphasis on the low-income and racial/ethnic minority populations where rates of childhood obesity were highest and rising fastest.

See Appendix 1 for an overview of RWJF investments in policy-related research, including obesity prevention initiatives from the early 1990s through 2014.

**Moving Toward Building a Culture of Health**

Early in 2014, RWJF fundamentally changed its way of operating from having separate teams focused on separate goals (e.g., reducing the rate of childhood obesity) to being one Foundation with one goal: building a Culture of Health for America. To achieve that vision, RWJF will prioritize support for programs that join with partners in many other sectors of society, united in the common recognition that where people live, learn, work, pray, and play matters to their health, and that it is essential to provide equitable opportunities for healthy choices and environments in order to benefit the U.S. populations at greatest risk for unhealthy behaviors and related health harms.

Since it began, Active Living Research’s overall vision has been to make being physically active part of daily life and normal routine by promoting policy and environmental changes that make the healthy choice the easy choice. Two of the program’s three goals support this vision: first, to investigate environmental factors and policies that can substantially increase population levels of physical activity, and then to translate that research into actionable evidence for policymakers to use in advocating for activity-friendly communities. Since 2007, the program has focused on research aimed at preventing childhood obesity, particularly among children from low-income and minority communities most affected by obesity.

\(^3\) Bridging the Gap also looked at youth decisions about drinking and illicit substance use, and later on childhood obesity. See the Program Results Report on its substance use work and the Progress Report on its childhood obesity work.
Program Design

Active Living Research is modeled on RWJF’s earlier Substance Abuse Policy Research Program (SAPRP), according to C. Tracy Orleans, PhD, RWJF senior scientist. “We focused on changing policies and environments to support healthy behavior at the individual and population levels.”

Program staff used a planning grant\(^4\) to solicit ideas from experts in public health and many other disciplines, as well as advocates in the field, who helped craft the initial vision of Active Living Research and defined its three core objectives:

- **Building a strong actionable evidence base** by exploring how policy and environmental conditions in the real world facilitate or inhibit physical activity
- **Building a field** by attracting and nurturing a vibrant cadre of ethnically, racially, generationally, and professionally diverse scholars committed to promoting a culture of health and active living in our country
- **Informing policy and practice** by disseminating and translating research into actionable evidence for practitioners and policymakers to use in their communities

According to Active Living Research National Program Director James F. Sallis, PhD, the “golden thread”\(^5\) that links the three objectives is the emphasis on interdisciplinary teams. These may include experts in exercise science, public health, transportation, urban planning, architecture, the behavioral sciences, recreation, landscape architecture, geography, law enforcement, economics, and education.

> **“Active Living Research’s interdisciplinary teams both improved the quality of research by combining expertise from multiple fields and enhanced the impact by linking researchers with practitioners, decision-makers, and advocates in numerous sectors of society.”**—James Sallis, national program director

From its initial authorization in July 2000 through January 2016, RWJF has provided $32.9 million in support of Active Living Research.\(^6\)

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\(^4\) ID 041228 ($131,171, April 1, to October 15, 2001)


\(^6\) The program was originally called Physical Activity Policy and Environmental Research, later changed to Active Living Policy and Environmental Studies, and then to Active Living Research.
Management

Active Living Research is housed in the Department of Family and Preventive Medicine at the University of California, San Diego, School of Medicine. National Program Director Sallis leads a multidisciplinary team that includes Co-Director Carmen L. Cutter, MPH; Communications and Partnership Manager Chad Spoon, MRP; and Strategic Engagement and Partnership Manager Amanda Wilson, MSRS.

National Advisory Committee

Early on, RWJF and the national program office established a national advisory committee to provide expertise and guidance to Active Living Research. Committee members helped establish topics to be funded, drafted sections of the calls for proposals, reviewed proposals, recommended investigators for funding, and presented at Active Living Research conferences. Committee members served through 2012.

See the Active Living Research website for a list of emeritus national advisory committee members and senior advisers.

Program Implementation and Evolution

Since the program’s inception, Active Living Research has remained consistently focused on its three core objectives while also adapting to changes in the external environment and transitions in the Foundation’s strategic priorities.

Three major program activity areas include:

Grantmaking to Build the Active Living Evidence Base

The primary mechanism for building the evidence base has been a series of 10 open calls for proposals released between May 2002 and February 2010 that solicited investigator-initiated research projects about modifiable policy and environmental factors affecting physical activity. Grants ranged from $30,000 to $600,000, although most were for $200,000 or less. Most grant periods were between one and three years.

Each call for proposals specified study topics and research questions identified as high priority by the national advisory committee, senior advisers, and other stakeholders and advocates. National program office staff also convened teleconferences with policymakers and researchers to solicit their suggestions as to priority issues for funding.

All of the calls for proposals are available on the program’s website. See Appendix 2 for more details on the annual calls for proposals and special solicitations, and brief summaries of projects funded under each of these.

7 The program was originally based at San Diego State University; it moved to University of California, San Diego, in December 2011.
The six calls for proposals issued between 2002 and 2006 focused on environmental and policy solutions to the epidemic of inactive lifestyles in the entire population—adults and children. Research topics included developing and validating tools to measure policy and environmental correlates of physical activity; the association between active living and aspects of the environment, especially transportation and recreation; special population studies; case studies of policy changes or innovations; and issues in rural communities.

Supporting RWJF’s Focus on Childhood Obesity

As RWJF prepared to announce its commitment to reverse the childhood obesity epidemic, it assessed the capacity of existing programs, including Active Living Research, to contribute to that effort through a combination of research, action, and advocacy. As part of that assessment, in 2006, RWJF funded a prospective evaluation of Active Living Research that examined its potential to adapt its strategies to support the focus on active living as a means of preventing childhood obesity.8

The evaluation found that Active Living Research had the capacity to support the new childhood obesity goals. The report noted that, through June 2007, Active Living Research had funded 42 studies focused on young people, 13 of which explicitly addressed obesity. Projects ranged from analyzing school physical education programs to examining the risk of inactivity among minority youth. See Appendix 3 for details.

Based in part on these findings, Active Living Research was authorized for a second round of funding (2007–2011) and changed its focus to establishing an evidence base about the environmental and policy factors of most relevance to youth. To support this transition, the national program office also added experts in youth research to the national advisory committee and made stronger connections with youth organizations.

Calls for proposals released from 2007 through 2010 aimed at promoting physical activity and active living among children, especially racial and ethnic minorities and children from low-income families. Studies funded after the transition differed from earlier studies in a number of ways:

- Fewer studies focused on measurement development and transportation issues.
- More research evaluated the impact of policy and environmental interventions and examined the school and social environment.
- Studies responded to stakeholder demands for economic and legal analyses of policy and environmental changes. No studies of this type were funded prior to 2007.

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8 Grant ID 58019 ($225,098, July 1, 2006 to June 30, 2007). The evaluation team included William Beery, MPH, affiliated with the Seattle-based Group Health Community Foundation; Judith Ottoson, EdD, MPH, a California-based private evaluation consultant; and Lawrence Green, DrPH, affiliated with the University of California, Berkeley.
Supplemental awards were given to researchers funded under Healthy Eating Research, a parallel national program of RWJF that focuses on environmental and policy strategies that promote healthy eating among children. These awards enabled researchers to add measures and analyses related to physical activity policies in school and daycare settings to new or existing Healthy Eating Research projects and strengthened their skills and prospects when competing for non-RWJF follow-on funding. For more information on this program, read the Progress Report.

Building a Diverse Multidisciplinary Research Field

The national program office used a multi-pronged approach to achieving the objective of building a diverse and vibrant cadre of researchers. Three key strategies included:

- **Supporting an interdisciplinary and racially–ethnically diverse cadre of researchers.** To be eligible for funding, proposals had to include multidisciplinary research teams that often included researchers from disciplines not traditionally associated with health. In addition to the annual calls for proposals, the national program office also offered special solicitations—dissertation and diversity partnership grants—that encouraged young, minority researchers to enter the field of active living research.

- **Open annual conferences.** Since 2004, the national program office has opened these yearly gatherings to non-funded researchers and advocates from multiple fields as well as Active Living Research grantees. All researchers are invited to submit abstracts of papers for presentation at the conferences. Typically more than 200 submissions are received from a multidisciplinary array of researchers. Selected presentations are then considered for inclusion in an Active Living Research journal supplement. Recently these meetings have drawn international researchers interested in collaborating across global boundaries.

- **Seminars at other organizations’ meetings.** National program office staff invites experts to present on selected topics, generally as part of annual meetings of professional associations. The strategy behind the seminars is to expose researchers attending their own professional conferences to speakers from other disciplines who offer perspectives that conference attendees would not otherwise hear.

Informing Policy and Practice

A Stronger Focus on Research That Informs Policy

While informing policy was always a core objective, the national program office increased its attention to this area over time, responding to feedback from policymakers and evaluators’ recommendations for quicker and more accessible translations of study findings into actionable evidence. In 2008 the national program office began soliciting proposals for up to 18-month Rapid Response grants that quickly assess the impact of policy and environmental changes occurring in real-world environments.
In 2011, it stopped releasing calls for proposals as it shifted from funding new investigator-initiated studies to awarding research translation grants to previously funded investigators. These allowed researchers to repackage their study findings and disseminate them to a broader audience of policymakers and practitioners.

“We really welcomed the challenge to translate and use all of the research and all of the papers and all of the findings that came out over the years,” says Sallis.

“I feel like we are generating a culture change among researchers, and, in a way, letting them out of their academic cage so they can have an impact in the bigger world.” —Jim Sallis

Communication and Dissemination Activities

Communicating with diverse audiences was critical for getting research into the hands of practitioners and policymakers. A multi-pronged approach was used to communicate with a wide array of both scientific and non-scientific audiences. As the program evolved, communication activities increasingly have focused on translating research into actionable evidence that could be used to create more active environments for children.

Key avenues of communication included publication in peer-reviewed journals—the “gold standard” for communication with scientific audiences—conferences and seminars for researchers from multiple disciplines; and a program website and webinars designed for large, diverse audiences.

To help Active Living Research investigators communicate more effectively with policymakers, the national program office was assisted by Bethesda, Md.-based Burness Communications and Prabhu Ponkshe, principal at Health Matrix, a Washington-based firm that assists healthcare organizations with policy communications. These consultants helped researchers and the national program office respond to media inquiries and present findings to elected officials, community groups, and advocates.

See Communications Results for details.

Collaborations and Partnerships

Sallis and his staff have worked with RWJF programs, federal agencies, and other organizations to promote research findings and share them with policymakers and advocates. Some examples include:

- The National Collaborative on Childhood Obesity Research (NCCOR). Established in 2009, NCCOR’s mission is to “improve the efficiency, effectiveness, and application
of childhood obesity research, and to halt—and reverse—childhood obesity through enhanced coordination and collaboration.\(^9\)

- **Salud America! The RWJF Research Network to Prevent Obesity Among Latino Children.** *Salud America!* is a national program that established and engages an online network of researchers, policymakers, advocates, and others interested in addressing childhood obesity among Latinos. The national program office of *Active Living Research* has provided translational research funding to help disseminate the work of *Salud America!* grantees. See the Progress Report about *Salud America!* for more information on this program.

- Other childhood obesity programs and initiatives. RWJF’s annual childhood obesity team meetings and *Active Living Research*’s annual meetings worked consistently to connect *Active Living Research* staff with that of other organizations in the field. These include *Active Living by Design*, *Leadership for Healthy Communities*, ChangeLab Solutions, which leads RWJF’s *National Policy & Legal Analysis Network to Prevent Childhood Obesity (NPLAN)*,\(^10\) and others. *Active Living Research* staff has regular telephone conferences with staff of the American Heart Association and other groups involved in RWJF’s *Voices for Healthy Kids* advocacy initiative and with staff of *Healthy Eating Research*. “We look for opportunities to work with them,” says Sallis. “We go to each other’s conferences and meetings.”

- Federal agencies. *Active Living Research* program staff works closely with the NIH, and CDC. Many *Active Living Research* investigators have gone on to apply for and receive research grants from these agencies. Sallis notes that NIH adapted *Active Living Research*’s Rapid Response grantmaking strategy for its own fast-track obesity-related grantmaking program.

> “I’m fortunate to serve as a member of the CDC Community Prevention Services Task Force,” says Orleans. “The Task Force oversees systematic and rigorous evidence reviews to determine for which population-health interventions there is sufficient evidence, and for which evidence is lacking or inconclusive, including in the physical activity arena. Many *Active Living Research* studies are informing these national guidelines.”

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\(^9\) NCCOR is an initiative of the National Institutes of Health (NIH), Centers for Disease Control and Prevention (CDC), the United States Department of Agriculture (USDA), and RWJF. By 2010, these organizations had committed more than $40 million in funding—as well as considerable scientific expertise—to projects related to NCCOR’s mission.

\(^10\) ChangeLab Solutions is an Oakland, Calif.-based organization specializing in researching and drafting model laws and policies, analyzing and recommending environmental change strategies, developing toolkits and fact sheets, and providing training and technical assistance to support policy reform efforts.
ACTIVE LIVING RESEARCH GRANTMAKING RESULTS

Between 2002 and 2012, the national program office awarded some 260 grants to researchers in support of Active Living Research objectives. These included support for:

- **Some 121 research studies to help build an evidence base on policy and environmental factors that affect physical activity.**

  Projects addressed topic areas specified in annual calls for proposals including transportation, parks and recreation, school-based and afterschool programs, community design; and the influence of factors such as crime, traffic patterns, and the condition of sidewalks on physical activity. Examples of funded projects include:

  — A study of patterns of park, trail, and sports facility use among Latino Americans living in and near Chicago by Kimberly J. Shinew, PhD, and colleagues at the University of Illinois.\(^{11}\) See the Program Results Report on this study.

  — An analysis of a community physical activity and sports programs designed to reduce violence in one New York City neighborhood by Mindy Fullilove, MD, and colleagues at Columbia University.\(^{12}\) See the Program Results Report on this study.

  — An investigation of the cost implications of incorporating New York City’s Active Design Guidelines into the design of family-focused affordable housing in New York, San Antonio, and Atlanta by Gayle Nicoll, PhD, at the University of Texas at San Antonio.\(^{13}\) See the Project Profile on the program’s website.

- **Some 15 Special Project studies that addressed aspects of active living that fell outside the issues and topics specified in the calls for proposals.**

  — An example is an evaluation by Kris Day, PhD, and colleagues at the University of California, Irvine, of 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. See the Project Profile on the program’s website.

- **Some 51 grants to encourage young and racial/ethnic minority investigators to engage in active living research.**

  — Some 33 Dissertation Grants supported young investigators pursuing doctorate degrees in fields related to active living. The awards—also called New Investigator Grants—were first offered in 2003 and continued through 2010. For example:

\(^{11}\) Grant ID52957 ($113,902; April 1, 2005 to September 30, 2006)
\(^{12}\) Grant ID 53701 ($30,000; July 1, 2005 to June 30, 2006)
\(^{13}\) Grant ID 68335 ($54,645; November 15, 2010 to July 21, 2011)
• Amy Vastine Ries, a PhD candidate at the Johns Hopkins Bloomberg School of Public Health, studied factors influencing African-American adolescents' use of recreation centers and parks for physical activity. See the Grantee Story about Vastine Ries.

— Six Diversity Partnership Grants were awarded between 2006 and 2008 to minority investigators connected with existing Active Living Research grants for studies of active living issues in minority or underserved communities. For example:

• Robert Brown, PhD, at Indiana University–Purdue University, Indianapolis, looked at how actual crime and perceptions of crime affect trail use. Brown used data from local police records, neighborhood resident surveys, and infrared trail monitors to augment a trail use model of an existing Active Living Research grant. See the Project Profile on the program’s website.

— Some 12 New Connections Grants were awarded in three rounds of funding (2008 to 2010) to researchers from historically disadvantaged and underrepresented communities. The grants were offered in conjunction with New Connections: Increasing Diversity of RWJF Programming, a national program designed to introduce researchers and scholars from historically disadvantaged and underrepresented racial/ethnic communities to RWJF’s research programs and grants. For more information on the program, see the Progress Report. Examples of these grants include:

• Leah E. Robinson, PhD, used a New Connections grant to study how well schools in the Black Belt region of Alabama implemented a state policy requiring daily physical education programs in schools. See the Grantee Story about Robinson and her study.

• Erin Hager, PhD, is a first generation college graduate from a low-income family. In 2009, shortly after earning her doctorate, she received a New Connections grant to examine how the environment affects body composition and physical activity of low-income, African-American middle school girls in Baltimore. Read more about Hager’s study program’s website.

Hager credits this support with setting her career in the direction she hoped for, focusing on policy and the built environment. She has received a K12 Career Development Award through the University of Maryland that will allow her to take formal coursework in GIS (geographic information systems) mapping. She has also been awarded a CDC grant to examine school wellness policy implementation in Maryland.

14 Grant ID 68571 ($72,712; January 15, 2011 to July 14, 2012)
15 K12 Awards are given to institutions by the National Center of Child Health and Human Development of the National Institutes of Health to support the work of pre- and/or postdoctoral fellows.
“Being part of both Active Living Research and New Connections has been instrumental in moving my career forward. I was able to learn more about the research Active Living Research grantees were doing, gained many career skills, and met so many talented people that I continue to communicate and work with regularly.”—Erin Hager, PhD

- **Some 15 Supplemental Grants to augment existing childhood obesity studies.**
  - Eleven of the grants provided financial supplements to existing RWJF Healthy Eating Research projects. The grants were awarded in 2007 in two rounds of funding and enabled researchers to expand their food policy studies with measures of physical activity in school and childcare settings. For example:
    - Ronette Briefel, PhD, of Mathematica Policy Research, analyzed the effects of school activity policies on body mass index (BMI) and obesity among students.\(^{16}\) This grant supplemented a Healthy Eating Research grant that focused on school food policies.\(^{17}\) See the Project Profile on the program’s website.
  
  - Four grants supported supplemental funds for a study originally funded by the National Institute of Environmental Health Sciences (NIEHS) focused on obesity and the built environment.
    - Anna Adachi-Mejia, PhD, of Dartmouth Medical School supplemented her three-year study of the relationship between the built environment and adolescent overweight in 26 communities in Vermont and New Hampshire. The supplemental grant allowed Adachi-Mejia to add measures of parent perceptions of the built environment, their motivation to be active, and their perceived barriers to being active.

- **Some 27 Rapid Response studies to quickly identify and evaluate promising interventions.** These time-sensitive, up to 18-month grants evaluated the impact of imminent changes in policies or environments (i.e., natural experiments) on children’s physical activity. They were awarded in three rounds of funding from 2008 to 2010.\(^{18}\) Applications were accepted on a rolling basis and applicants received notice within 12 to 14 weeks after applying; for example:

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\(^{16}\) Grant ID 61127 ($39,996; June 15, 2007 to June 14, 2008)

\(^{17}\) Grant ID 57930 ($399,852; June 15, 2006 to December 14, 2008)

\(^{18}\) Two of the three Rapid Response Calls for Proposal (2008 and 2009) were issued jointly with Healthy Eating Research.
- Natasha Frost, JD, at the Public Health Law Center at William Mitchell College of Law (St. Paul, Minn.) created and tested a comprehensive training module and a toolkit to help Minnesota school administrators, especially in low-income and minority areas, correctly apply a 2011 law that aimed to clarify school liability for allowing community recreational use of school facilities. The goal was to inform policies that promote access to places to be active. See the Project Profile on the program's website.

- Some 31 grants “repackaged” existing research in order to reach more policymakers and practitioners. These included:
  - 13 Research Translation Grants of about $40,000 each. These were issued starting in 2011 and enabled previously funded Active Living Research and other RWJF grantees to disseminate recently published study results with potential impact on policy and practice in communities and states most affected by childhood obesity. The grants produced permanent resources such as videos, briefs, and webinars targeted to key audiences. For example:
    - In 2011, Monica Lounsbery, PhD, and Thomas McKenzie, PhD, prepared two videos for school administrators, teachers, parents and others based on findings from prior Active Living Research work. “Making the Most of Physical Education” is a simple, colorful illustration of characteristics of quality physical education. “We Need More Physical Education in Schools” is an animated video explaining why quality physical education is important to children. Both are available on YouTube; click on the titles.
    - In 2014, Jennifer Isacoff, PhD, Trust for Public Land, prepared “Eight Ways Parks Improve Your Health,” a lively and colorful animated video that presents scientific information about the role of parks in physical activity. Isacoff used findings from a Rapid Response Grant, led by Deborah Cohen, MD, MPH, of the Rand Corporation, that evaluated Fitness Zones, outdoor gym facilities installed around the country by the Trust. Also see Isacoff’s blog post, “The Healthiest Place in Town” and the Project Profile on the program's website.
    - In March 2013, Emma Sanchez, PhD, a researcher at San Francisco State University, received a Research Translation Grant to disseminate findings from a 2009 Salud America! study that looked at school district compliance with physical education requirements and its influence on fitness among California’s Latino/Hispanic children. See the Project Profile on the program’s website.

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19 ID 69554 ($150,000; January 1, 2012 to December 31, 2013)
20 Grant ID 68486 ($15,686; February 1, 2011 to July 31, 2012) Research Translation Grant; ID 65563 ($49,111; December 1, 2008 to May 31, 2010) original study
21 Grant ID 65532 ($149,926; December 1, 2008 to May 31, 2010)
Some 18 “quick strike” Commissioned Analyses of up to $45,000 each. Researchers analyzed the literature to provide timely information to policymakers and advocates on topics such as the cost of bike boulevards, economic performance of walkable shopping areas, and physical activity effects of school sports policies. For example:

- David Bassett, PhD, at the University of Tennessee in Knoxville analyzed 65 studies assessing various approaches to getting kids to be active and then converted the data from those studies into a common measure of energy expenditure. Using that measure, they estimated the minutes of moderate to vigorous physical activity (or aerobic activity) generated by different types of interventions.

Mandatory daily physical education turned out to be the most intensive. Bassett’s team reported that physical education gave students, on average, 23 minutes of moderate to vigorous physical activity (MVPA) per school day. See Grantee Story for more information.

His analysis was published in a peer-reviewed journal for academic audiences with a summary for “lay” audiences available online. Active Living Research Co-Director Cutter prepared an infographic, called “What Works to Get Kids Active” based on Bassett’s paper. See also the Grantee Story on Bassett and his research.

Findings and Policy Implications of Selected Studies

The national program office identified the following projects as examples of how Active Living Research has contributed significantly to the field and/or helped shape policy. The seven projects, funded between 2007 and 2011, focused on parks and school policies and garnered considerable media attention, according to the national program office. (See Appendix 4 for findings from earlier projects).

How Parks Influence Children’s Physical Activity

Age and Gender Differences in Park Use by Children in Buffalo, N.Y.

James Roemmich, PhD, examined the duration of children’s visits, total activity, and intensity of activity while using various park features. He found that:

- Age and gender influence how long a child will play in a park.
  - During a 60-minute playground visit, younger girls and boys used play equipment about seven more minutes than older boys and girls.

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23 Grant ID 59450 ($205,150; January 1, 2007 to December 31, 2008)
— Older girls used open natural areas about five more minutes than younger girls, and older boys used these areas about eight more minutes than younger boys.

He noted the following policy implications:

- **The age differences in use of play equipment and open space suggest that playgrounds should be designed to include both play structures and natural elements such as open spaces, elevation changes, and trees.**

For more on this project, see the *Active Living Research* website for the Project Profile and a presentation by the project director.

**Residents in Two Diverse Cities Benefit From Neighborhood Parks**

Myron F. Floyd, PhD,\(^\text{24}\) identified specific park characteristics that led to physical activity among park users in economically and racially diverse communities in Tampa, Fla., and Chicago. He found that:

- **Park users in both communities engaged in moderate-to-vigorous physical activity and had higher energy expenditure at soccer fields and playgrounds, and at basketball, tennis/racquetball, and volleyball courts.**
  
  — Children in both cities were more likely to be observed walking or engaged in vigorous activity than adults.
  
  — More sedentary behaviors and lower levels of energy expenditure were observed in dog play areas, picnic shelters, baseball/softball fields, and open space areas.

Floyd noted the following policy implications:

  — **Neighborhood parks play an important role in children’s physical activity.** Efforts should be made to increase activity in parks by designing elements that influence activity levels, offering programs that allow for unorganized activity, and minimizing features that encourage sedentary behavior.\(^\text{25}\)

For more on the project director, see the Grantee Profile on Floyd.

**Parents’ Perceptions Influence Park Use by Kids**

Elizabeth Deakin, PhD,\(^\text{26}\) assessed how parents in the San Francisco Bay area perceived their neighborhood social environment and how that influenced walking and biking to

\(^{24}\) Grant ID 55862 ($97,160; July 15, 2006 to July 14, 2009). Floyd also received a Research Translation Grant to disseminate findings: Grant ID 68482 ($26,625: February 1, 2011 to January 31, 2013).


\(^{26}\) Deakin was funded by two grants: ID 50840 ($20,000, April 1, 2004 to August 31, 2004) and ID 53926 ($149,942, July 15, 2005 to July 14, 2008).
school by children and their use of neighborhood destinations such as parks. Findings, published in two articles,\textsuperscript{27,28} included:

- **Parents who drive their children one mile or less to school identify convenience (and not safety) as the main reason.** Safe Routes to School\textsuperscript{29} interventions aim to improve safety, but do little to address parental convenience and time constraints.

- **Parents who trust their neighbors are more likely to let children walk to school.**

Deakin noted the following policy implications:

- **Infrastructure improvements made as part of Safe Routes to School may not be enough to prompt increased biking or walking to school.** These improvements also have to:
  - Allow parents to interact with one another
  - Consider parental convenience and time constraints by introducing strategies like the “walking school bus,” where children walk to school in groups supervised by one or more adults other than the parent

### How School Policies Influence Children’s Physical Activity

**Monitoring the Impact of a Texas Bill Requiring Physical Activity in School**

Steven Kelder, PhD,\textsuperscript{30} monitored the implementation and impact of Texas Senate Bill 19, which allowed the State Board of Education to require elementary school children to participate in 30 minutes of daily physical activity and required the establishment of coordinated school health programs in elementary schools across the state. Kelder surveyed school principals statewide but his analysis focused on three regions along the U.S.-Mexico border with high concentrations of low-income and Hispanic families. Kelder found that:\textsuperscript{31}

- **Across the state, there was a high level of awareness and compliance with the physical activity requirements of the law.**

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\textsuperscript{29} Safe Routes to School promotes the creation of safe, convenient, and fun ways for children to bicycle and walk to and from school. Congress has approved funding for the program since 2005, and communities use these funds to construct bicycle lanes, pathways, and sidewalks and to operate education, promotion, and enforcement campaigns in elementary and middle schools.

\textsuperscript{30} Grant ID 52467 ($481,831; December 2004 to May 2008)

● In contrast, awareness of the mandate for a coordinated school health program was high but compliance was lower. Only 43 percent of schools surveyed had adopted a coordinated school health program, just a year before the deadline. About 40 percent were unaware of the need for parental involvement.

● One of the regions in the study with higher rates of implementing the program reported lower obesity rates. The region also reported more moderate-to-vigorous physical activity among students during physical education, and more recess time.

   — The reduced obesity rate in this region suggests the value of Senate Bill 19 to support school-based efforts and makes a case for greater investments in community-based physical activity and nutrition programs.

Kelder pointed to the following policy implications:

● To promote healthy behavior, and ultimately prevent chronic disease, coordinated school health programs should be adopted, implemented, and sustained.

● Support from community organizations and continued follow-up, evaluation, and refinement are related to successful implementation of legislation promoting physical activity.

● It is important to monitor the implementation of state law requirements, making adjustments as needed to either the legislation or program implementation.

Studying “Learning Landscapes” in Denver

Lois Brink, MLA,\textsuperscript{32} assessed how upgrading inner-city school playgrounds in Denver into “Learning Landscapes” influenced children’s physical activity levels. She also examined how neighborhood social processes mediated the impact of these environmental interventions. Brink reported the following findings in two articles\textsuperscript{33,34}:

● Activity levels and energy expenditure were significantly higher among children at schools with renovated playgrounds. These levels were sustained over time.

● Physical activity among boys and girls significantly increased in certain areas of the schoolyard—for example, soft surface structured play areas that included swings, monkey bars, play equipment, and play fields. This suggests that girls will

\textsuperscript{32} Grant ID 53073 ($147,588; May 2005 to December 2007). Brink received a Research Translation Grant to disseminate findings from the study: Grant ID 63351 ($49,966 from November 2007 to October 2008).


engage in physical activity at levels similar to boys if appropriate equipment is available and they feel safe in the play environment.

Brink noted both the policy implications and policy impact of this work:

- **Redevelopment of schoolyards is an effective strategy to encourage physical activity and increase overall energy expenditure among children in their daily routine.**

- **Results of the study influenced passage of a 2008 bond measure stipulating that by the end of 2012, every elementary school in Denver would have a Learning Landscapes playground.**

For more on Brink, see the Grantee Story.

**Physical Education Policy and Childhood Obesity in Mississippi and Tennessee**

John M. Amis, PhD, analyzed case studies of eight schools in Mississippi and Tennessee to learn how physical education policies are developed and enacted from the state level down, how these policies affect and are affected by resource allocations, sources of resistance to and reasons for support of policies, and degrees of effectiveness in implementation strategies. Key findings include:

- **Demand for academic achievement drives school policy and is pervasive across high schools regardless of socio-economic, cultural, or academic classification.** Administrators, teachers, and students have internalized this logic and in seven of the eight schools studied, actively avoided adherence to new physical education policies.

- **Physical education had become increasingly marginalized to the extent that it was largely viewed as expendable by everyone involved.**

- **The potential effectiveness of new physical education policies is particularly dependent on the attitudes and actions of school principals.** Issues such as resource constraints, inadequate facilities, and the sheer number of new policies facing principals are used to justify why new physical education policies should be avoided or opposed.

- **Physical education is heavily subjugated to varsity sports.** Physical education teachers often show greater concern for varsity team performances than for the needs of the majority of the students.

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35 Grant ID 57758 ($202,133; July 1, 2006 to June 30, 2009)


Amis noted the following policy implications:

- Physical education must be made central to the prevailing education policy.
- Principals need incentives to implement new physical education policies.
- Policymakers should recognize that perceptions of overcrowding, inadequate facilities, or varsity sport requirements are impediments to effective physical education policy implementation.
- Physical education teachers must be held accountable for the way they deliver physical education to students; and incentive systems should reflect this.
- Policymakers must go beyond arms-length consultation with principals, physical education teachers, and others, and actively include them in crafting legislation.

Impact of a Walking School Bus Program in Houston

Jason A. Mendoza, MD, MPH,38 assessed the impact of a walking school bus—a group of children led to and from school chaperoned by adults—on children’s rates of walking or biking to school, safety, and physical activity. Eight ethnically diverse, low-income schools in Houston were randomly assigned to either the intervention group, where walking school bus programs were offered, or a control group where usual modes of transportation were available. Mendoza noted the following findings39,40:

- “Active commuting” (biking or walking to school) increased from 23.8 percent to 54.0 percent for children in the intervention schools over the five-week study period whereas it decreased from 40.2 to 32.6 percent among children in the control schools.
- Children in schools with walking school bus programs achieved a relative increase of about seven minutes more per day of moderate to vigorous physical activity.
- Researchers noted potential safety benefits of walking school bus programs.
  - Motor vehicle commuting decreased by about 36 percent in schools with walking school bus programs. That drop has implications for school-related traffic, pedestrian injury risk, and air pollution.
  - Children using walking school buses were five times as likely to cross at a corner or crosswalk compared to children in control schools.

38 Grant ID 63773 ($197,514; February 1, 2008 to January 31, 2010)
Mendoza noted both the policy implications and policy contribution of this work:

- A walking school bus program is a promising way to increase children’s active commuting and moderate to vigorous physical activity while promoting safer pedestrian behaviors on the walk to and from school.
- This study validated the Safe Routes to School travel survey for use in Spanish and English among low-income Latino and non-Latino black children.

See the Grantee Story about Mendoza.

**OTHER RESULTS OF THE PROGRAM**

**Measurement Development**

- **Investigators developed, applied and/or evaluated 173 new active living tools and measures.** Tools fell into three categories:
  
  — Observational tools to assess the environment: An example is the Physical Activity Resource Assessment (PARA) Instrument, a one-page, check-box instrument to assess attributes (amenities, quality, features) of physical activity resources such as parks, churches, fitness centers, and trails.

  — Observational tools to assess physical activity: An example is Physical Activity School Score (PASS), a free user-friendly, web-based eight-item tool that assesses and increases awareness of evidence-based physical activity practices at elementary schools.

  — Surveys to assess perceptions of the environment: An example is the Twin Cities Walking Survey, a compilation of measures used to assess environmental and social factors related to physical activity, including perceptions of the neighborhood (such as crime and social support), demographics, retail stores, and pedestrian and bicycle safety.

Copies of these and 35 other tools with the broadest applicability appear on the Tools and Measures section of the Active Living Research website along with details about how to use them. “People really identify us with the measures that the research has generated and that we make available. Those measures are pretty well used in research and now they are getting into practice,” says Program Director Sallis.

> “The tools and measures help us evaluate our work. A lot has not been well evaluated, so it is nice to go to Active Living Research to learn how to assess impact. We are not researchers, but their tools have been useful to us as evaluators.” —James Krieger, MD, chief of chronic
Partnerships With Organizations Outside the Health Sector

- **Active Living Research** helped design and roll out a new Building Healthy Places initiative with the Urban Land Institute. The Urban Land Institute, an organization of land developers and builders, invited Active Living Research staff to work with them on this initiative that aims to shape development of private and commercial real estate in ways that improve the health of people and communities. “We are developing a strong partnership with them, which is unexpected and excellent,” says Sallis.

Leveraged Funds and Other Funders

- Funded investigators leveraged $62.4 million from other funders from 2001 through 2011. Of the total, 70 percent was from NIH, 11 percent from the CDC, and 10 percent from other foundations. One stakeholder interviewed for the evaluation noted that several Active Living Research-funded studies served as pilot studies for subsequent NIH proposals and that “investigators have found a way to be more confident in applying for additional monies from NIH.” Orleans comments that “This was among the original explicit goals for the Active Living Research program.”

**Active Living Research** stimulated and shaped the agendas of private funders, such as the Mary Black Foundation and The California Endowment. It also informed the research agenda of institutes within NIH.

One private funder interviewed for the evaluation said “I have used Active Living Research data with our board of directors and our other decision-making bodies.” The funder reported that the organization had “shifted an increasing percentage of its grantmaking portfolio into environment change.”

Communications Results

- As of August 2014, funded researchers and the national program office had published some 393 articles in peer-reviewed journals and leading practice-based publications:
  - Active Living Research findings were the focus of 15 special journal issues and supplements, including:
    - *Journal of Physical Activity and Health* (2006 and 2011)
To further an interdisciplinary discussion, the national program office invited experts in multiple fields to write 17 commissioned papers that were included in journal supplements.

Beginning in 2012, most of the papers in the supplements were accompanied by an article summary to aid in translating research results for nonscientific audiences.

Full texts of these journals are available from the Journal Special Issues section of the Active Living Research website.

- **Funded investigators and the Active Living Research team produced 39 research briefs and syntheses.** These were some of the primary vehicles for communicating with lay audiences. These documents are short, more accessible versions of the material presented in journals, with findings translated into actionable recommendations for policymakers, practitioners, and advocates to use in their work.

  The Research Briefs & Syntheses section of the website provides summaries and full texts of all briefs, syntheses, and reviews. The following are three examples:

  — Daniel A. Rodriquez, PhD, wrote a research brief based on his Active Living Research grant[41] demonstrating how investments in infrastructure and other transportation programs can help people become more active on a regular basis. The June 2009 brief noted:

    - Walking or biking to school can help children be more active.
    - Sidewalks, bike lanes, and public transit promote physical activity.
    - Multi-use trails can promote walking and bicycling, especially among women and people living in lower-income areas.
    - Public policies and funding that support infrastructure investments can help promote physical activity.

[41] ID 49862 ($473,238, December 1, 2003 to November 30, 2007)
— A four-page research brief by investigators Abigail Gamble, PhD; Jeffrey S. Hallam, PhD; and Michael L. Cormack, EdM, synthesized research on Mississippi’s in-school physical activity requirements, student weight status, academic achievement, and the Healthy Students Act (a state law specifying minimum levels of physical activity for students).\(^{42}\) The January 2014 brief noted:

- There is an obesity disparity between black and white students statewide.
- In-school physical activity requirements promote student academic achievement.
- About 44 percent of Mississippi schools did not have a recess policy.
- Mississippi Delta schools with the highest proportions of obesity have the most active students when given the opportunity.

See the Grantee Story on Gamble.

— Darla M. Castelli, PhD, and colleagues wrote a research brief\(^{43}\) summarizing studies that examine how physical activity and fitness may help school-age children maximize academic performance, and provides an overview of the effects of physical activity on the brain. The December 2014 brief noted:

- Regular participation in physical activity has academic performance benefits.
- Single sessions of physical activity can enhance attention and memory.
- The effects of physical activity on brain health may explain improvements in academic performance.
- Educators, administrators, and parents should thoughtfully integrate physical activity across the curriculum throughout the school day to facilitate learning.

- The Active Living Research website made actionable evidence accessible to a wide audience of both researchers and non-researchers—averaging 29,896 page views per month. The national program office also reported that during the period from June 1, 2013 to May 31, 2014:

  — Some 3,936 visitors interacted with the website (an interaction is a download or a click to a resource on the site).
  — Some 74 percent of visitors were new.
  — Users came from 201 countries.


\(^{43}\) This brief builds on a September 2009 research brief prepared by Stewart G. Trost, PhD, at Oregon State University.
The website features information produced by the national program office, funded researchers, presenters at the annual conferences, and others. Examples of website sections are:

- The **Tools & Resources** tab includes summaries and slides of research papers, syntheses, and results; tools and measures; videos, webinars, and presentations; and contact information for experts available to answer questions.

- The **For Grantees & Researchers** tab has summaries of grants, a literature database of articles about environment and policy factors related to physical activity and obesity, texts of journal special issues, and past calls for proposals.

- The **News & Events** tab includes copies of *Active Living Research News*, information about upcoming events and webinars, and details of annual conferences.

In 2012, the national program office revamped the website in conjunction with its growing emphasis on “packaging” existing research in order to inform policy. Changes included more timely updates and taking advantage of social media to share news. Social media networking features include the *Active Living Research* YouTube channel, a “Move!” blog, a Facebook page, and Twitter page.

To communicate complex findings quickly and clearly to practitioners in an even more accessible format than research briefs, the national program office staff created infographics, seven of which are available for download from the website (as of August 2014). Examples are:

- **“Changing Communities Gets People Moving”** This infographic highlights changes in physical activity after modifications to streets, sidewalks, schools, and parks were made.

- **“The Role of Parks and Recreation in Promoting Physical Activity.”** This infographic shows that parks and recreation areas can provide economic benefits to families and communities as well as increase physical activity.

- *Active Living Research* hosted or coordinated 12 webinars, some of which were attended by as many as **320 people**. Webinars covered topics such as:

  - **“Ready for Recess,”** a two-part web forum for teachers and other school staff who are directly involved with leading recess activities. See Part 1 and Part 2 of the webinar on the *Active Living Research* website.

  - **“How to Increase Cycling for Daily Travel: Lessons from Cities Around the Globe,”** presented in collaboration with the Institute of Transportation Engineers.

  - **“Counting Bicyclists and Pedestrians to Inform Transportation Planning,”** geared toward planners and engineers. The webinar highlighted the best methods for estimating bicycling and pedestrian traffic in cities.
• **Active Living Research has coordinated 11 annual conferences since 2004.** The annual conferences have grown in popularity—354 people attended in 2014 compared to 138 in 2004. One attendee noted, “The meeting sells out. If you’re doing work in this area, that’s the place you want to go.”

The conferences contributed significantly to building a diverse, multidisciplinary field. The conferences were “translational events,” according to RWJF’s Orleans, with attendees representing an array of end users of Active Living Research products such as town planners, zoning officials, and engineers.

“A key component of the program is the incredibly successful conference. They...constantly change the format to give people what they want. Over time they became more translational. The young investigators in particular had a lot of time to interact with others.”—Active Living Research Evaluator Dianne Barker, MHS

Agendas and presentations from all 11 conferences are available [online](#).

• **From 2003 to 2014, Active Living Research sponsored more than 30 seminars and other events attended by more than 1,000 people.** These contributed to the program’s objective of building a multidisciplinary field. Presenters’ areas of expertise included recreation and leisure studies, obesity, education, criminology, environmental justice, urban planning, pediatrics, prevention research, policy studies, and transportation. Examples include:

  — A November 2006 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.


See Appendix 5 for a complete list of dates and topics.

**Actionable Evidence: An MD’s Perspective**

James Krieger of the Seattle-King County Department of Public Health, who met Sallis at an annual conference, testifies to the practical value of Active Living Research’s “real world” evidence. “They have really made efforts to go where practitioners are,” said Krieger, who has used Active Living Research to inform his department’s strategic planning around physical activity interventions. The King County health department was “getting interested in using land use policies. It was very timely for us to have a place to go that summarized what was known and what had worked.”
“I think what was great about what they did was to think about what kind of research has to be done to move practice forward. The research they funded created a practice-oriented field. Many of the journals now have a practice orientation, and that didn’t exist before.”

“Our department got $25 million in federal stimulus funding in 2010, $15 million for physical activity and nutrition, and $10 million for tobacco prevention. This was a huge opportunity for us to make a change. The stimulus money gave us the ability to fund more activities, and Active Living Research publications guided us in what to fund.”—James Krieger, MD

THE EVALUATION AND ITS FINDINGS

Two retrospective evaluations of Active Living Research looked at the program’s effectiveness in achieving its three major objectives of 1) building an evidence base, 2) fostering a new multidisciplinary field of researchers, and 3) informing policy and practice. The first evaluation examined the program’s early phase (2002 to 2006), the second the later phase (2007 to 2011), following the shift in focus to childhood obesity.

Both were conducted by Marjorie Gutman, PhD, and Dianne Barker, MHS. Gutman is principal at Gutman Research Associates (Cranbury, N.J.). Their evaluation was supported and managed by RWJF’s the Research and Evaluation Department. Barker is president and CEO of Barker Bi-Coastal Health Consultants (Calabasas, Calif.) and research program director at the Public Health Institute (Oakland, Calif.).

In the first evaluation, funded by an RWJF program contract, the evaluators concluded that the program had made good progress toward the first two objectives, but had not made significant progress in informing policy and practice, largely due to the relatively short time the program had been in operation. See Appendix 3 for details about this evaluation and its findings.

Active Living Research: 2007–2011

In 2011, RWJF’s Research and Evaluation Department turned to Barker and Gutman again to evaluate the second phase of Active Living Research. This evaluation, funded through a subcontract from the national program office, measured how well the program had moved beyond its first two objectives to inform policies and practice about childhood obesity. This evaluation considered major accomplishments of Active Living Research

44 Program Contract ID 53158 ($249,709, June 15, 2006 to June 30, 2007)
from 2007 to 2011; its potential for continued contributions if it were reauthorized; and how the program could be sustained after RWJF funding ended.

This evaluation was an in-depth descriptive study that analyzed qualitative and quantitative data. It featured:

- Interviews with 100 people: RWJF and national program staff, national program advisers, leaders of other RWJF childhood obesity programs, other funders, academic leaders, private sector leaders, policy and advocacy organization leaders, and state and local government practitioners.

Barker contracted with the San Francisco-based consulting firm, See Change Evaluation, for many of the interviews. Most were conducted by telephone and explored topics such as:

- The respondents’ familiarity and involvement with Active Living Research and their perceptions of its contribution to policy and practice.

- Collaborations between Active Living Research and other RWJF programs and with the active living field in general.

- Recommendations for the next phase of Active Living Research and for ways to sustain it in the long term.

- The primary quantitative data source was the February 2011 Active Living Research Impact Survey of investigators conducted by the national program office. The web-based survey included 29 questions and was completed by 128 investigators who had received Active Living Research grants from 2002 through 2010, 78.5 percent of those who had received funding (163 investigators).

**Findings From the 2007–2011 Evaluation**

The researchers summarized their findings in an article in the American Journal of Preventive Medicine, concluding that Active Living Research succeeded in achieving all three of its objectives during its second phase (2007–2011).45

**Building the Evidence Base**

- **Close to 400 journal articles on Active Living Research findings filled major knowledge gaps.** Articles synthesized and disseminated findings not only from Active Living Research studies but from the field at large.

- One interviewee said, “Active Living Research has probably done more to move this whole field of active living forward than anything before or anything that has come since.”

Another said that the program helped shift the focus of active living research from randomized trials to designs that were more appropriate to community research.

**Building an Interdisciplinary and Diverse Field**

- **Funded researchers who responded to the 2011 survey represented 31 disciplines, with more than one quarter (28%) having five or fewer years of experience.** Of those researchers who were new to the active living research field, 39 percent were people of color.

- A sample of disciplines represented by the funded investigators included:
  - Health (e.g., epidemiology, public health)
  - Recreation and leisure science (e.g., exercise science)
  - Physical environment (e.g., engineering, transportation)
  - Social science (e.g., child development, criminology)
  - Policy science-related (e.g., business, economics, law, political science)

One national advisory committee member interviewed said “I think Active Living Research has also changed the research agenda in many other disciplines (e.g., urban planning, environmental psychology, sociology, political science).”

Another interviewee noted, “We’ve got clusters of students doing joint degrees now. Public health students previously would never have thought of getting an urban planning degree or a public policy degree.”

- The program has inspired “the next generation of active living researchers” according to the evaluators. The recruitment of younger researchers through dissertation and New Connections grants contributed to this result, along with the willingness of funded researchers to mentor students new to the field.

  - Some 42 percent of principal investigators who responded to the Impact Survey said they mentored students in active living research.

  - Some 11 percent of respondents created and taught a new course related to active living and 51 percent embedded content into an existing course.

- Over time Active Living Research increased the number of its funded researchers from racial/ethnic minority populations and economically disadvantaged communities. As one interviewee—a national advisory committee member—said, “Active Living Research not only looked at the proportion of underserved populations being studied, but also made sure there was diversity among the researchers.”

In an interview, Barker reflected on the impact of the increasing diversity.
“I think there was a lot of learning that went on—suburban white environments are different from urban environments; and suburban environments where Latinos live are different than suburban white environments. A lot of these differences were clarified by researchers under Active Living Research, and if the program hadn’t funded minority researchers, those issues and differences would likely not have been studied.”—Dianne Barker, evaluator

**Informing Policy and Practice**

Overall, Barker and Gutman concluded that *Active Living Research*’s impact on policy and practice—the area where it was weakest in the first evaluation—had grown significantly from 2007 to 2011.

- Over the course of *Active Living Research*, 62 policy contributions were made—the evaluators identified 53 during the second phase, compared with only nine during the first phase. Policy contributions include a wide variety of communication and advocacy efforts to inject research evidence into the policy process.

Barker and Gutman developed a three-part typology to distinguish the influence of *Active Living Research* on policy and practice. Levels One and Two include activities that contribute to but do not result in actual change, such as distributing materials to policymakers and advocates (Level One) or inserting research into a master plan for bike or pedestrian trails (Level Two). Level Three contributions informed an actual change in policy or practice (e.g., implementation of a master plan based on the research).

- Some 41 percent of Impact Survey respondents reported at least one communication with a policymaker, advocate, or practitioner during 2010. Some 52 percent of these were in-person meetings.

> “Compared to the results of the earlier evaluation, the level of direct contact between policy and advocacy organizations and Active Living Research had increased considerably, and the contact appeared to be more content-specific.”—Dianne Barker and Marjorie Gutman, evaluators

- Some 32 contributions (51.6% of the total policy contributions) informed an actual policy or practice change. Most (75%) were at the local level, including regional governing authorities, school districts, and county or city government.
— Some 17 were bicycle- and pedestrian-related. Examples included installing bicycle walkways and paths; passing Complete Streets legislation; implementing traffic-calming features to improve trail safety; and providing new monies for non-motorized improvements.

— Some 11 were school-related. Most included passage of bills requiring more minutes of physical activity per week or more teacher training and physical activity resources, and expansion of Safe Routes to School policies.

— Three were park- and playground-related. In one case, a city recreation department restructured playgrounds and other public areas to promote physical activity.

— One state added body mass index (BMI) measures to a state immunization registry.

- Research produced by national program office staff, as well as funded researchers, played an active role in shaping major policy documents. The evaluators cited as examples the U.S. National Physical Activity Plan and two state initiatives mandating physical activity time in schools in California and Virginia.

“If you look at the national physical activity plan, it is chock full of things that have sprung out of Active Living Research… the fact that we actually have a national physical activity plan as an independent, self-sustained nonprofit entity now, that’s looking to work across different disciplines, I think that is a direct result of Active Living Research. ”— stakeholder quoted in the evaluation report

The evaluators also pointed to some areas for improvements in the next phase of Active Living Research:

- State-level practitioners were more familiar with Active Living Research resources than local practitioners. This points to a need to address new documents to what people need at the local level.

- Practitioners at both levels expressed a need for material that is more accessible, although they were able to offer examples of policy contributions from the program.

In general, most representatives of policy and advocacy organizations suggested that Active Living Research papers were not adequately reaching the front line of activist

46 As defined by the National Complete Streets Coalition, bicyclists, motorists, and transit riders of all ages and abilities

47 Grant ID 71566 ($1,750,000, February 1, 2014 to January 31, 2016)
policymakers at both the state and local levels who can move research into action. These interviewees reported:

— The program’s translational information was too academic, with few narratives to frame the issues.

— Materials often lacked action steps describing how to use the findings to affect policy.

— They would like to see greater collaboration among Active Living Research, elected officials, and community members.

**Recommendations From the Evaluation**

Drawing from interview responses, the evaluators made recommendations for Active Living Research going forward. Overall, they noted that “the desire for brief, credible, and accessible information was universal.” Specific recommendations were:

- Place more emphasis on national impact.
- Focus clearly on communities and populations most affected by the childhood obesity epidemic.
- Give “top priority to translation and dissemination of research evidence, bridging from research to practice and policy including prominent support for RWJF-led advocacy efforts.”
- Continue some funding for research and for nurturing a field of investigators, but in a more modest and targeted form that gives priority to identifying the most cost-effective policies and environmental interventions.
- Continue the program’s “unique role in the convening and facilitation of interdisciplinary relationships and team-building functions.”
- Explore options for continuing funding to sustain the program in the long term. These include work with federal agencies—“marrying CDC and NIH,” as one national advisory committee member suggested.

**SIGNIFICANCE OF THE PROGRAM**

“Active Living Research helped to set the stage for all the work we are doing now in building a Culture of Health by refocusing upstream on the environmental factors and away from individual determinants of health. It’s hard to remember that when it was launched, it truly was a cutting-edge program. It changed the paradigm of understanding the
drivers of physical activity so pervasively, that it’s easy now to take this shift for granted.”—Tracy Orleans, RWJF

Sallis sees the change paradigm in concrete terms. “As I go around the country I see a lot more places to ride bicycles safely,” he says. Sallis subscribes to a newsletter of an organization that promotes more walkable, healthier communities around the country, the Congress for the New Urbanism. “About 10 to 12 years ago, they would list new walkable communities that were approved or built. Then, about five years ago they said, ‘We can’t list those any longer because there are too many of them—we can’t keep up.’”

For Sallis the creation of a new multidisciplinary field of active living research is a hallmark of the program. “When we started Active Living Research in 2001, there was essentially no research being done across disciplines. Then, when the federal stimulus program was enacted in 2009, funds for public health and obesity prevention were to be used only for policy and environment interventions.

“By that time, we had an evidence base that could be drawn from to guide the interventions, and we could give people findings about which way to go that would be more useful. That was a really empowering experience,” said Sallis.

Barker agrees, “Active Living Research brought in the urban planning and recreation science fields, as well as leisure science researchers—who have their own journals and associations. Physical activity and public health researchers were not connected to those disciplines.”

“Before Active Living Research, there were people working in public health and people working in urban planning, but the connection was not there about why it was important for public health to think about the urban landscape.”—Dianne Barker, evaluator

As a physician and substantial user of Active Living Research findings, James Krieger, has a hands-on view of the program’s significance. “The biggest thing [in active living] has been the explosion in the field, a field that didn’t exist before. Physical activity and active living have benefits beyond preventing obesity, but I think the interest in obesity galvanized things. Active Living Research was able to shape and ride that wave.”

LESSONS LEARNED

In interviews and reports to RWJF, national program office staff and the evaluation team reflected on challenges they faced in Active Living Research and how they solved them.
**General Lessons From the National Program Director**

1. **Stay focused on the mission but avoid burnout.** “Inspiration and commitment to an important mission make many things possible, but it is important to try not to take on too much. This may mean reevaluating and reprioritizing on a regular basis.”

2. **Recruit an inspired team.** “The most important lesson I could offer to program offices is to find capable and inspired national advisory committee members, outside advisers, staff, and collaborators,” says Sallis.

**Lessons About Building the Evidence Base**

3. **Remind your audience that ‘obesity isn’t all about eating too much.’** Much of the emphasis on reducing obesity has been on nutrition. “So, we have to keep raising our hands to say, ‘What about energy expenditure and energy balance?’ And, there is a lot of evidence that when obese kids are active, their health is better,” notes Sallis.

4. **Recognize that policy contributions cover a wide array of valuable efforts, not all of which result in actual policy change.** Barker and Gutman noted the challenges involved in attributing policy changes to research. “The policy change process is extremely complicated and research is only one of the many factors that influence it.”

   Research contributes to policy in many ways—inserting research-based information into discussions with policymakers, and testifying before policymaking bodies, for example. To distinguish levels of policy contribution, as noted earlier, Barker and Gutman developed a three-part typology based in part on the framework developed by Ottoson and colleagues,\(^{48}\) which outlines varied ways that research can inform policy, as well as different points on the policy spectrum where research might be used.

**Lessons About Building a Diverse, Multidisciplinary Research Team**

5. **Keep reaching across boundaries in active living research.**

   “Our biggest challenge is that so many sectors of society that are outside of the health field impact physical activity. This drives the range of disciplines we have partnered with. It drives the number of government agencies, professional organizations, and advocacy groups that are relevant to our work. It is a much bigger universe than people in other fields have to deal with—and that keeps stretching us.”—Jim Sallis

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The substantial effort *Active Living Research* devotes to engaging with organizations that have not historically viewed themselves as part of health or physical activity has paid off. “For example, the American Planning Association [now] has health staff, and there is a lot more health programming at the National Recreation and Parks Association.”

6. **Help researchers familiarize themselves with methodologies from other fields.** Research projects from different disciplines differ in their design elements, measurement tools, and sampling methods. Bringing these techniques together to develop integrated projects is challenging.

“We pretty much required interdisciplinary teams, so researchers had to learn to work together. Maybe that wasn’t always smooth, but they got a lot of experience and got to know each other.”—Jim Sallis

7. **Make presentations at conferences of various disciplines.** National program office staff met with researchers individually, developing alliances spanning many fields. For example, by introducing people promoting bicycling for environmental reasons to others promoting bicycling for health, national program office staff spurred research that crosses these disciplines. (National Program Office)

8. **Recruit experts from many disciplines to serve as proposal reviewers, national advisory committee members, and conference presenters.** This increases diversity in the applicant pool and the selection of grantees. (National Program Office)

9. **Hire staff with diverse backgrounds who enjoy working across disciplines.** *Active Living Research* staff members come from many fields including public health, planning, parks and recreation, psychology, and sociology. In addition to working across disciplines, the staff learns to advocate for cross-disciplinary work within their own disciplines. (National Program Office)

**Lessons About Informing Policy**

10. **Urge researchers to speed up the dissemination of findings.** The long timeline for publishing research in peer-reviewed journals makes it difficult to issue timely “bullet points” and “talking points” for policymakers and practitioners. The national program office used rapid response grants to address this and “started encouraging and almost requiring researchers to release findings before publishing them,” said Chad Spoon of the national program office.

11. **Be flexible when asking researchers for quick turnaround studies.** Many formative rapid response or quick-strike projects were opportunistic evaluations of the impact of a policy or environmental change, such as the renovation of a park or opening of a supermarket in a low-income community. Such “natural experiments
don’t hold to a predictable timetable,” said Cutter. “The investigator is not controlling the intervention” and may not be able to adhere to a strict timeline, added Sallis.

12. Consider infographics for disseminating research findings at low cost. Well-done infographics are eye catching and make for good talking points. Infographics produced by Active Living Research have appeared on federal websites including the U.S. Department of Transportation and in community plans.

GOING FORWARD

In July 2012, RWJF reauthorized Active Living Research through January 2014 when the program officially closed. In February 2014, however, RWJF made a grant to extend the work of Active Living Research through January 31, 2016.\(^49\) The focus of the grant is on accelerating the translation and application of previously funded research to policy and environmental strategies for increasing physical activity levels and reducing childhood obesity among children ages 2 through 18, especially in populations at greatest risk.

The grant includes several approaches suggested by the Barker and Gutman evaluation: expanding partnerships with advocacy and policymaking organizations and viewing decision-makers as the main audience.

National program office staff and RWJF’s Orleans continued to explore ways to expand the program’s funding base and sustain it for the long term. Staff is developing a vision for the future that allows the program to retain its team and build on the relationships and the experience it has developed since 2001. The strategy includes:

- Supporting Voices for Healthy Kids, an outreach and advocacy initiative of RWJF and the American Heart Association established in January 2013. The program has six hub areas, four focused on healthy eating and two—active places and active kids out of school—focused on physical activity.

  “I look at Voices as a key recipient of the research we develop. Our job is to integrate research into their work to give it a stronger basis to contribute to the overall effort. Our staff are on the hub working groups. . . . We have also funded research projects for the physical activity hubs to help with their work.”—Jim Sallis

\(^49\) Grant ID 71566 ($1,750,000, February 1, 2014 to January 31, 2016). This grant also supports the Active Living Research conference (“The Science of Policy Implementation.”), scheduled for February 2015. Details are available on the program’s website.
• A collaboration with Nike. Nike provided one grant of $15,000 to Active Living Research for help in its Designed to Move campaign. Sallis is exploring additional ways the program can work with Nike and other athletic equipment corporations.

• An effort to engage Accountable Care Organizations, groups of doctors, hospitals, and other health care providers who come together voluntarily to give coordinated high quality care to their Medicare patients.

Sallis believes Active Living Research can help these organizations, which were established by the Affordable Care Act in 2010, to expand their understanding of community health to include built environments. “We are pretty sure they are looking only at the health status of people and aren’t looking at the drivers of health status,” he says.

• Expanding the collaboration with the Urban Land Institute’s Building Healthy Places initiative.

• Building capacity to train staff from public health, planning, parks, and other departments to work together to adopt health-relevant measures in their work and to track their progress.

• Working with the National Collaborative on Childhood Obesity Research to sustain program elements through its government sponsors. Sallis, a member of NCCOR’s external scientific panel, sees it as “one of our best hopes for institutionalizing and spreading some of what Active Living Research has done.”

• Working with federal agencies and other partners to take over funding of the Active Living Research conference, the literature database, its tools and measures, and other areas.

Continuing to Build a Culture of Health

RWJF’s new emphasis on building a Culture of Health has implications for virtually all grantees and programs. As of mid-2014, many of the specifics are still under development, but both Orleans and Sallis believe that Active Living Research’s track record of strong relationships with many different disciplines is consistent with and supportive of RWJF’s direction.

“Our whole mission is to make a healthy choice an easy choice for all populations, and change the environments where people eat, work, live, pray, and play.” —Tracy Orleans

50In 2010, Nike reached out to more than 70 organizations to better understand the reasons for physical inactivity and to establish an action agenda. Since then, the American College of Sports Medicine and the International Council of Sport Science and Physical Education joined with Nike to develop the action plan found in the Designed to Move report.
Sallis agrees.

“From the active living point of view, I feel that a culture of health is the idea of ‘health in all policies.’ All of our ALR’s work within varied sectors including transportation, engineering, city planning, and others, are about creating a culture of health within these non-health organizations and groups. To me, this is a pretty good model for a culture of health—it is not just within health groups, but everywhere you go in society.”—Jim Sallis
APPENDIX 1

RWJF Programs and Initiatives Addressing Policy and Environmental Solutions to Public Health Problems

Programs Focused on Tobacco and Other Substance Use

- The Tobacco Policy Research and Evaluation Program (TPR), (1992–1998) used research as a means to inform policies regarding tobacco use. See the Program Results Report for more information.

- The Substance Abuse Policy Research Program (SAPRP), (1994–2009) funded experts in a variety of fields to research policy issues related to substance abuse in order to find ways to reduce harm caused by alcohol, tobacco, and illicit drug use. For more information, see the Program Results Report.

- Bridging the Gap: Research Informing Practice and Policy for Healthy Youth Behavior, was established in 1997 with the goal of understanding how policy and environmental factors affect whether young people decide to smoke, drink, or use illicit substances. See the Program Results Report for Bridging the Gap’s phase one work on substance use.

Programs Focused on Healthy Eating and Active Living

- Leadership for Healthy Communities: Advancing Policies to Support Healthy Eating & Active Living provides expertise and technical support to local and state 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.

- The Active Living Network (2001–2007) 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 the Program Results Report for more information.

- 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) ran from 2005 to 2008. It 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. See the Program Results Report for more information.

- The Childhood Obesity Modeling Network (COMNet) (2007–2009) aimed to create a network of childhood obesity modelers in the United States and across the world in order to strengthen and integrate 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 built 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 United States. See the Story about COMNet on rwjf.org and see the Program Results Report on the mathematical model.

**Obesity Prevention Synergy Grants**

From 2005 to 2007, RWJF funded two sets of obesity “synergy grants” linked to two national programs—the Diabetes Initiative (2002–2009) and Injury Free Coalition for Kids® (2001–2008). Grantees received $60,000 for 18-month pilot projects whose purpose was to test innovative approaches that RWJF might consider incorporating into its $500 million national initiative to reverse the obesity epidemic.

- **Community-Based Childhood Obesity Prevention** provided additional funds to eight sites participating in Injury-Free Coalition for Kids®. Grantees were asked to build on their existing partnerships to focus on environmental approaches to increase access to healthy foods, integrate the promotion of healthy eating with efforts to increase physical activity, and begin to address policy concerns. The OMG Center for Collaborative Learning conducted brief assessments of the eight projects. Their Final Report is available online. See also the Program Results Report on the overall program; one sidebar is on the obesity prevention work.

- The Obesity Prevention in Children: Synergy with Diabetes Initiative national program (2005–2007) provided funds to four projects to conduct pilot projects focused on promoting policy and environmental changes targeting children ages 3 to 12 at greatest risk for obesity. See the Program Results Report for more information.

**Programs Directed at Active Living in General**

- **Active for Life: Increasing Physical Activity in Adults Age 50 and Older!** (2001–2009) tested two evidence-based strategies aimed at increasing physical activity among sedentary people age 50 or older by incorporating physical activity into their daily routines. See the Program Results Report for more information.

- The Active Living Resource Center (2002–2010) provided information and technical assistance about physical activity to community agencies trying to create active communities. See the Program Results Report for more information.

- In Active Living by Design (2001–2009) 25 communities implemented projects designed to revamp the built environment, change public policies, and expand programs to make physical activity part of everyday life. See the Program Results Report for more information.
**Programs Directed at Preventing Childhood Obesity**

- In 2003, RWJF redirected the work of *Bridging the Gap* away from a focus on factors influencing youth decisions about substance use towards increasing understanding of policy and environmental factors affecting their decisions about diet, nutrition, and physical activity. See the Progress Report on *Bridging the Gap’s* work in this area.

- *Healthy Eating Research: Building Evidence to Reduce Childhood Obesity* (2005–2015) supports studies that identify and evaluate policies and environmental approaches with strong potential to improve children’s diets. See the Progress Report for more information.

- *Healthy Eating by Design* (2005–2007) a program within *Active Living by Design*, funded 12 community partnerships testing environmental and policy approaches to promoting healthy eating in school or community settings. See the Program Results Report for more information.

- *Healthy Kids, Healthy Communities: Supporting Community Action to Prevent Childhood Obesity* (2007–2016) uses *Active Living by Design* national program staff and structure to help 49 community partnerships promote changes to local policies and the physical environment that foster healthy living and prevent childhood obesity. Read the Progress Report for more information.

- *Voices for Healthy Kids*, a collaboration between the Robert Wood Johnson Foundation and the American Heart Association, works to help all young people eat healthier food and be more active.

**APPENDIX 2**

**Examples of Funded Projects Under Annual Calls for Proposals (2002–2010) and Complementary Grant Mechanisms**

**Regular Calls for Proposals**

*Active Living Research* released 10 rounds of calls for proposals from 2002 to 2010. While all addressed policy and environment correlates of physical activity, the national program office targeted priority topics of interest:

**Round 1, May 2002**

Target topic: *Measurement Tools*

- **Project 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

Target topic: *Environmental Correlates of Physical Activity*

- *Project 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 Program Results Report for details.

Round 3, November 2003

Target topic: *Special Populations*

- *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.

Round 4, September 2004

Target topic: *Case Studies of Policy Change or Innovation*

- *Example:* From September 2005 to August 2007, researchers at the University of Pennsylvania School of Design analyzed policy innovations that stimulated downtown living in Philadelphia between 1990 and 2000.

Round 5, March 2005

Target topic: *Analyses of Active Living Policies that Might Affect Other Policy Areas*

- *Example:* From January 2007 to July 2009, researchers at Temple University studied a range of communities and their experiences in adopting and implementing land use policies that support active living.

Round 6, February 2006

Target topics: *Influences on Youth Use of Parks; Physical Activity In and Around Buildings; and Rural Issues*

- *Example:* From January 2007 to December 2007, researchers at Tufts University assessed physical activity opportunities and habits in rural elementary school children living in regions of Virginia, Mississippi, Arkansas, Kentucky, Georgia, and South Carolina.

Round 7, March 2007

Target topics: *Environmental and Policy Influences on Children's Activities; Evaluations of Policy Interventions in Schools*

- *Example:* From January 2008 to January 2010 researchers at the University of Houston assessed the intentions of 5th-grade Hispanic children to be physically active
in various locations, the association between their intentions and their level of activity, and other factors related to the perceptions of Hispanic children and their mothers.

**Round 8, March 2008**

Target topics: *Evaluations of Policy or Environmental Interventions; Studies of the Interactive Effects of Built Environment and Social/Cultural Factors; Studies of Economic Determinants; and Analyses of Macro-Level Policies.*

- *Example:* From February 2009 to July 2011, researchers at the University of Nebraska, Omaha, estimated the effects of trained recess staff, recreational equipment, or both on physical activity participation in elementary school children living in low-income neighborhoods in Omaha.

**Round 9, February 2009**

Target topics: *Evaluations of Policy or Environmental Interventions; Studies of Economic Determinants or Impacts; Analyses of Macro-level Policies, Measurement Development and Evaluation; and Health Impact Assessments*

- *Example:* From January 2010 to July 2012, researchers at St. Louis University, Mo., measured physical activity levels in a low-income, African-American neighborhood before and after significant revitalization efforts were undertaken. See the Grantee Profile of Project Directors Cheryl Kelly, PhD, MPH, and Michael R. Elliot, PhD.

**Round 10, February 2010**

Target topics: *Evaluations of Policy or Environmental Interventions; Economic Analyses; Analyses of Macro-Level Policies; Quantitative Meta-Analyses; Evaluations of Youth Advocacy Efforts; and Community Case Studies.*

- *Example:* From August 2011 to July 2012 researchers at the University of Miami, Miller School of Medicine investigated whether increases in school crossing guards in Miami were associated with an increase in the number of children walking and biking to school in 10 elementary schools.

**Rapid Response Calls for Proposals**

Rapid Response projects are time-sensitive, opportunistic studies that evaluate natural experiments occurring in real-world environments.

**Rapid Response Grants, Round 1, May 2008**

- *Example:* From February 2009 to January 2010, Melicia Whitt-Glover, PhD, implemented and evaluated the impact of a planned change in school policy to increase daily student physical education and to incorporate “Instant Recess” in a small sample of local public elementary and middle schools and afterschool programs
in Forsyth County, N.C. Instant Recess is an innovative, information technology-based exercise break that focuses on increasing moderate to vigorous physical activity through simple, 10-minute exercise outings. Read the Project Profile of Whitt-Glover’s study on the program’s website.

Rapid Response Grants, Round 2, March 2009

- **Example:** From January 2010 to January 2011, Georgia Hall, PhD, assessed out-of-school-time physical activity and healthy eating policies before new national policies were put in place in 2010. Rapid Response funding allowed researchers to provide perspective and guidance in advance of the new standards. Read the Grantee Story about Hall.

Rapid Response Grants, Round 3 May 2010

- **Example:** From May 2011 to June 2013, Aaron Hipp, PhD, developed a strategy to increase urban youth and family participation in St. Louis Open Streets events and evaluate the effect of promotion strategies on participation levels. In “Open Streets,” a popular section of streets are closed to cars, and community members are encouraged to bike, walk, or play on the streets. Read the Grantee Story about Hipp.

New Connections

Active Living Research–New Connections Call for Proposals, July 2008

- **Example:** From January 2009 to January 2011, Janice Johnson Dias, PhD, studied the relationship between low-income urban black mothers’ perception of neighborhood safety and their daughters’ physical activity. Read the Grantee Story about Johnson Dias.

Active Living Research–New Connections Call for Proposals, May 2009

- **Example:** From February 2010 to July 2011, Kevin L. Nadal, PhD, studied Filipino American youth and the cultural, socioeconomic, and mental health experiences that influence their physical activity. See the project description of Nadal’s study.

APPENDIX 3


This RWJF-solicited and funded evaluation included two components: a retrospective evaluation of the program’s success in meeting its objectives and a prospective evaluation to ascertain the program’s potential for adapting to RWJF’s focus on preventing childhood obesity.
The Retrospective Evaluation

Marjorie Gutman, PhD, principal at Gutman Research Associates, and Dianne Barker, MHS, president and CEO of Barker Bi-Coastal Health Consultants in Calabasas, Calif., assisted by Faith Samples-Smart, PhD, of Columbia University, took a retrospective look at Active Living Research. They:

- Explored the extent to which Active Living Research established an evidence base for environmental correlates of physical activity, spurred the development of a new transdisciplinary field of research, and informed public policy

- Examined the extent to which the program stimulated the growth of other funding for research in this area

- Assessed the extent to which the program filled a unique niche in research on physical activity

Gutman, Barker, Samples-Smart, and colleagues:

- Interviewed 88 funded investigators, national program office staff, national advisory committee members, RWJF staff—and policymakers, advocates, and other funders. 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 and 181 of 492 non-funded applicants completed the survey. Respondents described their work in active living, offered assessments of Active Living Research and recommended future research priorities.

- Analyzed program data to determine the disciplines represented by the investigators, types of studies undertaken, characteristics of the populations studied, disciplines of annual conference attendees, no-cost extension requests, and the NIH database of relevant grants to ascertain the type of federally funded projects in this area.

The Prospective Evaluation

William Beery, MPH, of Group Health Community Foundation, Judith Ottoson, EdD, MPH, an evaluation consultant, Lawrence Green, DrPH, at the University of California, San Francisco, took a prospective look at the program. They:

- Explored whether and how Active Living Research worked to build a field of research on policy and environmental factors related to active living and assessed the likely trajectory of the program's future impact

- Examined strategies that Active Living Research could take to inform policy and work more closely with policymakers
Examined ways that *Active Living Research* might evolve to address RWJF’s interest in preventing childhood obesity

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 these state-level policymakers and practitioners were aware of *Active Living Research*
- Interviewed 77 policymakers, advocates, researchers, and RWJF and national program office staff members to gather perspectives on *Active Living Research* and its potential future role in creating evidence, building a field, and informing 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**

The evaluators conducting the retrospective and prospective *Active Living Research* evaluations reported their findings in reports and team presentations to RWJF as well as in papers published in the peer-reviewed literature. See the Evaluation Bibliography for citations. The findings overlap and are described here by theme, with attribution to the evaluation at the end of bullets to either Gutman/Barker or Group Health.

**Establishing Evidence About Environmental Correlates of Physical Activity**

- Both evaluation teams found that *Active Living Research* significantly contributed to building a knowledge base about environmental correlates of physical activity.
  
  — Almost 40 percent of funded investigators surveyed said they had developed at least one new measurement instrument. (Gutman/Barker)

  — *Active Living Research* studies addressed several population groups:
    
    - 38 percent were devoted to the population as a whole.
    - 24 percent focused on children or adolescents.
    - 15 percent focused predominantly on low-income or minority groups or communities. (Gutman/Barker)

  — 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, 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

- Both evaluation teams found that Active Living Research did build a transdisciplinary field of science.
  
  - Active Living Research investigators came from more than 20 disciplines. The most frequently represented fields were: physical environment (34%), health (19%), social sciences (12%), and nutrition (10%). (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 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 responding to the survey were 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

- Both the Gutman/Barker and Group Health Cooperative teams found that Active Living Research made measurable progress in contributing to policy discussions, but the program's influence was 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 policymaker 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, policymakers 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. (Gutman/Barker)

Some 84 percent of policymakers, researchers and state coordinators of federal programs (such as the CDC’s Nutrition and Physical Activity Program to Prevent Obesity and Other Chronic Diseases) who were not part of *Active Living Research* and were interviewed for the evaluation had heard of the program, and 66 percent of state coordinators knew of at least one funded study. (Group Health) In general, policymakers, 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 informing 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 informed 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 of 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**

Gutman/Barker examined whether *Active Living Research* was able to involve other funders interested whether the program occupied a niche that did not duplicate the work of others. They found:

- *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 funding, 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* fills a distinctive niche in stimulating and supporting research on policy and environmental factors to promote active living. Other public and private funders 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 Beery to examine whether Active Living Research could evolve to focus on research supporting RWJF's decision to focus on preventing childhood obesity. He and his colleagues concluded:

- Active Living Research can change its focus to support RWJF's priority on preventing childhood obesity.

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 as well. 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 policymakers and advocates. By seeking out programs and tracking their impact, researchers could also study implementation and sustainability, both important issues to policymakers. (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 inform and support policy (Group Health)

- Actively reach out to and seek feedback from policymakers and practitioners. For example:
  - Future calls for proposals could require that applicants include a policymaker 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 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 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 policymakers 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 policymaker 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 that can inform policy. Convincing, explicit cause and effect findings are critical for policymakers, 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 policymaker 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 policymakers 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)

APPENDIX 4

Additional Summaries of Findings From Active Living Research Studies

• Russell Jago, PhD, 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.

Articles based on this study were published in the *American Journal of Health Promotion*, the *American Journal of Preventive Medicine*, and other publications. See the Funded Investigator Bibliography for more information.

• Natalie Colabianchi, PhD, MA, 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 playgrounds.

  — 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.

An article based on this study was published in an *Active Living Research*-focused supplement to the *Journal of Physical Activity and Health* and is available online. Also see the Funded Investigator Bibliography for more information about the supplement.

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51 Grant ID 49866 ($100,000, December 1, 2003 to November 30, 2005)
52 Grant ID 51590 ($99,497, July 1, 2004 to February 28, 2006). Colabianchi has since moved to the Institute for Social Research at the University of Michigan.
Kim D. Reynolds, PhD, and other researchers at the University of Southern California in Los Angeles studied neighborhood predictors of urban trail use.\(^5\) They found:

- Trail use was positively associated with trails that had mixed views, streetlights, that were in good condition, and that 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.

An article based on this study was published in the *Active Living Research*-focused supplement to the *American Journal of Health Promotion*. See the [Funded Investigator Bibliography](#) for more information about the article. The study also appeared in a chapter in the book entitled *Handbook of Pediatric Obesity: Epidemiology, Etiology, and Prevention*. See the [Funded Investigator Bibliography](#) for more information.

Pamela Wridt, PhD, and other researchers at the University of Colorado in Denver explored variables that influenced how children use their local environment for physical activity.\(^4\) They identified the following variables:

- **Walkability:** size of sidewalks; weather; distance to recreation, food, or friends; traffic density; and other factors

- **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

Her chapter, "Learning from Learning Landscapes: Promoting Children's Physical Activity Through School Yard Design" appears in a book entitled *Environments, Behaviour and Society*. See the [Funded Investigator Bibliography](#) for more information.

Nilda Cosco, PhD, at North Carolina State University in Raleigh, analyzed physical activity in outdoor areas surrounding preschools.\(^5\) She found:

- The amount of physical activity afforded by preschool play areas can be intentionally improved by design.

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\(^5\)Grant ID 49890 ($592,322, December 1, 2003 to September 30, 2007). Reynolds subsequently received another grant, Grant ID 65385 ($75,693, December 15, 2008 to June 14, 2011) for a study entitled “Extending Knowledge of Trail Use Among Urban Planners, Parks and Recreation Officials, and Communities.”

\(^4\)Diversity Partnership grant ID 55699 ($70,316, December 15, 2005 to March 14, 2008). Wridt received a subsequent grant, Grant ID 63344 ($49,941, November 1, 2007 to December 31, 2009) to develop an online guide on mapping the local environment.

\(^5\)Dissertation grant ID 50957 ($23,085, May 1, 2004 to May 31, 2006)
— 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.

A chapter entitled "Preschool Outdoor Environments: An Emerging Opportunity for Children's Daily Active Living" appeared in the book *Open Space: People Space*, and articles, some co-written with other *Active Living Research* grantees, appeared in several journals. See the [Funded Investigator Bibliography](#) for more information.

- Noreen McDonald, PhD, and Elizabeth Deakin, JD, SB, SM, 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.

Articles based on this study were published in the *American Journal of Preventive Medicine* and other journals. See the [Funded Investigator Bibliography](#) for more information.

- Melissa Nelson Laska, PhD, RD, while a PhD candidate at the University of North Carolina at 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 the 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.

See the [Grantee Story](#) about Nelson Laska.

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56 Dissertation grant ID 50840 ($20,000, April 1, 2004 to August 31, 2005)
57 Dissertation grant ID 50752 ($17,785, April 1, 2004 to May 14, 2005). Nelson Laska is currently at the University of Minnesota.
Articles based on this study were published in the *American Journal of Preventive Medicine* and in other journals. See the [Funded Investigator Bibliography](#) for details.

- Brian Saelens, PhD, and other researchers at the Cincinnati Children's Hospital Medical Center in Cincinnati developed the environmental assessment of public recreation spaces (EAPRS), a tool measuring the physical environments of parks and playgrounds. They found the tool to be reliable in assessing parks' and playgrounds' physical environments.\(^{58}\)

Articles from the study appeared in several journals, including the *American Journal of Public Health*, the *Journal of Physical Activity and Health* and other journals. See the [Funded Investigator Bibliography](#) for information about the publications.

- Karen Mumford, PhD, at Emory University in Atlanta analyzed characteristics of frequent park users.\(^{59}\) She found that more frequent park users were people who lived close to parks, walked to parks, were senior citizens, or were dog walkers.

- Christopher Coutts, MPH, at the University of Michigan in Ann Arbor studied the effects of diversity of land use and physical activity on greenways, which are strips of undeveloped land near an urban area, set aside for recreational use or environmental protection.\(^{60}\) 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.

Findings from the study appeared in *Environment and Planning B* and the *Journal of Urban Planning and Development*. See the [Funded Investigator Bibliography](#) for details.

- Abby C. King, PhD, at Stanford University in Palo Alto, Calif., and collaborating researchers from five other universities, analyzed environmental influences on regular physical activity.\(^{61}\) 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.

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\(^{58}\) Grant ID 47330 ($91,052, January 1, 2003 to October 31, 2004)

\(^{59}\) Grant ID 49860 ($597,734, November 1, 2003 to June 1, 2008)

\(^{60}\) Dissertation grant ID 55799 ($23,563, November 1, 2005 to November 14, 2007)

\(^{61}\) Grant ID 47335 ($83,999, February 1, 2003 to January 31, 2005)
— 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.

Findings from the study appeared in Preventive Medicine and the American Journal of Health Promotion. See the Funded Investigator Bibliography for more information.

- Susan J. Handy, PhD, and other researchers at the University of California, Davis, analyzed the role of residential location choice and walking behaviors.\(^6\) They found that residents of traditional neighborhoods walk substantially more than residents of suburban neighborhoods.

Findings from the study appeared in the Journal of the American Planning Association. See the Funded Investigator Bibliography for information.

- Greg Norman, PhD, at the University of California, San Diego, under a subcontract from the national program office, 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.

Findings from the study appear in the 2006 Active Living Research-focused supplement in the Journal of Physical Activity and Health. See the Funded Investigator Bibliography for more information.

**APPENDIX 5**

*Active Living Research Seminars and Other Events*

- 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) encouraged policymakers 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 of the American Public Health Association (APHA).

\(^6\)Grant ID 53540 ($50,000, August 1, 2005 to June 30, 2007), Grant ID 57780 ($124,694, June 15, 2006 to December 14, 2008), and Grant ID 65386 ($92,501, December 15, 2008 to December 2009)
• 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) focused on measurement techniques and a literature review.

• October 2005: A seminar for members of the National Recreation and Park Association (NRPA) presented researchers from university parks and recreation programs with research methods and techniques that likely were unfamiliar to them.

• April and June 2005: Training for professionals to observe physical activity 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 the use of these tools.

• December 2005: A second seminar for members of the Built Environment Institute during the APHA annual meeting. Participants discussed actions the Institute might take to in redeveloping areas affected by Hurricane Katrina.

• April 2006: Seminar sessions and a keynote presentation by Program Director Sallis 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 opportunities in active living research.

• October 2006: A session at the 2006 NRPA annual conference featured presentations about three parks and about 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 departments.

• November 2006: A seminar 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 (North American Association for the Study of Obesity, also called 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. Focus group goals 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 Second Annual 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 Active Living Research.

- November 2008: A seminar entitled “The Next Frontier: Criminology, Obesity, and Active Living” at the American Society of Criminology Annual Meeting.


- April 2009: A seminar entitled “Playgrounds, Parks, and Physical Activity: Active Living Research and Child Development in Denver” at the meeting of the Society for Research in Child Development.


- January 2010: A seminar entitled “Understanding the Link Between Transportation and Public Health: Measuring Travel Behavior, the Built Environment, and Physical Activity Outcomes” at the Transportation Research Board 89th Annual Meeting.


- March 2010: A seminar entitled “Interventions That Reduce Obesity and Asthma Among Hispanic Children” at the National Hispanic Medical Association annual meeting.

- April 2010: A presentation entitled “Designing Active Communities for Youth” at the National Planning Conference of the American Psychological Association.
- June 2010: A symposium entitled “Active Living: Societal Approaches to Prevention Across Multiple Behaviors” at the Society for Prevention Research annual meeting.

- July 2010: A seminar entitled “Practitioners as Advocates: Promoting Environmental and Policy Change to Increase Physical Activity and Decrease Obesity among Low-Income and Racial and Ethnic Minority Children” at the National Medical Association annual meeting.

- September 2010: A seminar entitled “Federal Funding for Pedestrian and Bicycle Programs: What the Research Tells Us” at the ProWalk/ProBike annual meeting.


- July 2011: A seminar entitled “Policies and Environments to Promote Active Living and Healthy Eating in Latino Communities” at the National Council of La Raza 2011 annual meeting.

- October 2011: A seminar entitled “Designing Community Recreation Spaces for Health and Wellbeing: Applying the Research Evidence” at the American Society of Landscape Architects annual meeting.
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