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Making Physical Activity Research Relevant to Policy Makers

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Widespread concern about the obesity epidemic has put research on physical activity into a public policy spotlight. Congress, state legislatures, and city councils are all considering measures designed to help create environments that reduce the risk of obesity. While the majority of these actions to date have centered on nutritional issues, many measures to encourage physical activity are also under consideration. In the first half of 2005, at least 18 state legislatures considered bills designed to increase access to walking and bicycling,[1] and many have considered other environmental initiatives to increase active living.[2] A survey of local governments by the International City/County Management Association found that 86% had introduced or were considering initiatives linking bicycling, walking, community design, and health.[3] Lawmakers and agency officials are all clamoring for research that tells them what works.

"Research can be an incredible catalyst to expediting change," according to Ron Sims, Executive of King County, in Washington. "Research that is very well done can bring about an incredible momentum for change." King County, which encompasses Seattle and surrounding communities, is involved in one of the most ambitious efforts nationwide to use rigorous research results to pin down the impact of transportation and land use on travel behavior, air quality, and health.[4] Yet the experience of Sims and other elected officials has led them to believe that researchers need to better understand the world in which policy makers operate. If researchers want to ensure that their work makes a difference, they need to conduct research that answers the questions that policy makers are asking, then go the extra mile to ensure that their research results are accessible—and, if appropriate, then point in a clear policy direction.

Executive Sims and policy makers from the federal, state, and local levels shared their views at a panel convened at the 2005 Active Living Research annual conference to discuss the research that policy makers need—and how to deliver it to them. This article reports the key themes articulated by the panel,* and the quotes are from that discussion.

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*This panel was videotaped, and DVDs are available from http://www.activelivingresearch.org/index.php/View_Policy_Panel_Presentation/318.

Understanding the World of Policy Makers

While researchers pay close attention to creating models that effectively explain how the environment influences whether people get out and get active, policy makers must introduce and defend their initiatives within pre-existing assumptions and frameworks. Representative Sean Faircloth, who serves in the Maine House of Representatives, initiated an anti-obesity initiative two years ago that culminated in July 2005 with enactment of a statewide child anti-obesity law. He said researchers presenting data and statistics should be aware of some of the frames that come into play when taking legislative action to increase physical activity.

A powerful frame that often works against public health initiatives is a resistance to government intervention—the belief that the government should stay out of individuals' lives. Rep. Faircloth said one effective answer to this frame is to illustrate the government intervention that has created the current unfriendly environment for physical activity, such as the subsidies to the oil and automotive industries, the subsidies for advertising of junk food, and even outdated government food programs. Federal policies have long prioritized the automobile-oriented development[5] that research is now linking to lower levels of physical activity and increased health risks.[6-9]

Another frame common in public policy circles is freedom of choice, and it is important to be able to frame the debate on creating activity-friendly environments in these terms. In part, this means documenting the lack of available choices. While such data are sparse, one federal survey found that 25% of all walking trips take place on roads without sidewalks or shoulders, and that bike lanes are available for only 5% of bicycle trips.[10] Rep. Faircloth noted that the contrast between low bicycling and walking rates in the US and the high rates in the Netherlands are due in large part to the environment—and the choices provided to the Dutch. When seen in this light, Faircloth believes the active living movement is "not an intervention so much as it is ensuring that our citizenry has greater freedom of choice."

Perhaps most relevant for researchers, the burden of proof for new physical activity policies weighs on those introducing them. Policy makers are asked to prove that their policy intervention will make a difference, and often this is framed in economic terms. Will the investment of time and money pay off by avoiding increased health care costs? If results cannot be measured in economic terms, what other measurable benefits will be achieved, for quality of life or health? Rep. Faircloth recommended working to reframe the burden of proof to be on the shoulders of those who would restrict the freedom of choice that is offered when more bicycling and walking facilities are put in place.

The frames discussed above are common in the US, but federal, state, and local policy makers have very different tools at their disposal when they are looking to improve physical activity. That means they will use research differently. "Think of the dissemination of your research at all three levels of government: federal, state, and local," recommended Cindy Burbank, Associate Administrator for Planning, Environment, and Realty at the Federal Highway Administration.

The federal government is extremely influential in transportation policy, because of the massive federal transportation bill. While the bulk of the $386 billion program goes to automobile-oriented highways, the 2005 law (known as SAFETEA-LU)[11] dedicates an estimated $4.5 billion to non-motorized transportation.[12] The new law

includes several new opportunities, such as a Safe Routes to School program that is delivering over a $1 million annually to each state. More funding is also expected to be dedicated to planning for bicycling and walking. According to Burbank, policy analysts in the Federal Highway Administration need research results to help them as they conduct outreach, craft guidance for the states on implementing the law, and create training programs for transportation agencies.

While the federal government allocates the funds, decisions on how to spend transportation money are made primarily by elected officials and agency staff at the state and regional level, through the state Departments of Transportation and Metropolitan Planning Organizations. These officials need to know how transportation investments might influence physical activity.

Regional and local officials also need to know what land use changes may affect physical activity. Land use decisions are almost always made at the local level and often focus less on spending and more on regulating the development process through local comprehensive plans, zoning and other policies. They need ideas for innovative interventions—and evidence that they work.

Research Questions of Interest to Policy Makers

Policy makers have a clear idea of the types of research questions they would like answered. Executive Sims noted that initially, policy makers in King County were "winging it"—adopting policies to promote physical activity that seemed to make intuitive sense, without much else to go on. They then launched the King County Land Use, Transportation, Air Quality and Health study (LUTAQH), spearheaded by researcher Larry Frank. The study has found that compact, walkable neighborhoods with many destinations close by are most effective in encouraging physical activity.[13] "Research will be a great validator of what we are trying to do, and it will also create a new perspective and we will be able to branch out and do far more," said Sims. He and the other policy makers suggested questions they would most like answered as they pursue policy solutions:

- *What policy initiatives will effectively return our investment by delivering reduced costs and better health?* State Senator Tom Torlakson of California has sponsored several pieces of legislation dealing with the obesity crisis and providing more opportunities for physical activity. He believes that economic models would help. "We know that a dollar invested in preventing drug and alcohol abuse results in $4 to $5 saved to government agencies and somewhere between $10 to $15 saved in terms of absenteeism and increased productivity," said Sen. Torlakson. "Can we do the same thing for built environment issues?" Torlakson would like to know if encouraging urban infill projects that create walkable, transit-centered neighborhoods will save taxpayers in the long run. Executive Sims would like to see research that shows an impact on health-care costs for government and businesses.
- *Where have policy initiatives worked to increase physical activity and improve health?* The desire for more such case studies grows in part out of the sheer complexity of establishing the relationships between the built environment,

behavior, and health. Robert Cervero of the University of California at Berkeley noted that when researchers try to isolate the impact of the built environment on behavior they end up involved in "fancy regression analyses" that don't resonate with policy makers. Such research may also fail to point toward practical solutions. Instead, studies that rigorously document the impact of interventions can advance science and policy making.[14] Rep. Faircloth believes case studies can help create a "domino effect" as nearby localities adopt a successful policy. The new federal transportation bill includes a number of interventions that provide an opportunity for such research. For example, the new Non-Motorized Pilot Project will put $25 million into providing a comprehensive non-motorized travel network in four communities. The program provides for rigorous data collection and analysis.

- *What is the role of self-selection?* Policy makers would also like more research that shows the impact of self-selection on whether people bicycle or walk. Opponents of increased emphasis on walkable communities say that studies that compare walkable and non-walkable neighborhoods only show that people who like to walk and bicycle choose to live in neighborhoods where this is possible. Longitudinal studies that follow individuals over time are one way to get at this question. Another avenue is to document a lack in freedom of choice—can researchers quantify the extent to which walkable neighborhoods are not available to all the people who want them?
- *How can we influence behavior?* Executive Sims would like a more precise understanding of what it takes to motivate people to adopt active lifestyles, so policy interventions can be better targeted. For example, what would it take to create a "bike culture" that makes bicycling a normal, everyday behavior?
- *What land use and zoning changes make the most difference?* The range of potential policy interventions to change land use is staggering: from creating zones for transit-oriented development to requiring sidewalk construction. Which policies will truly influence the way people travel? What is the cost benefit of redesigning old neighborhoods?

Engaging the Policy Process

Senator Torlakson suggests that researchers can effectively engage the policy process from start to finish. Researchers can work with policy makers to shape initial research questions, and such collaboration can also ensure that research results are readily accepted.[15] During the initial stages of defining the problem and gathering ideas, researchers can help lawmakers see trends in their own backyard, often by serving on task forces or testifying at hearings. Getting research results into the mainstream media magnifies the impact of research, helps lawmakers focus on key ideas, and gives support and credibility to their efforts.

Once lawmakers are working on a bill, research on effective interventions can drive the formulation of legislation, as it did for laws discouraging tobacco use and drunk driving. When the bill is working its way through the legislative process,

research findings that illustrate the problem and justify the proposed solutions are critical for gaining wider support.

Policy makers sometimes see a disconnect between their needs and the way researchers often approach their work, in terms of timeframe, language, and research specialization. "Time is not an ally if you want to make change," said Executive Sims. "When a researcher says he'll have that in four to five years, that is too long. We need expedited research approaches." The specialization of researchers often does not align with policy arenas and can frustrate policy makers who would like to take a comprehensive approach to making change.

Many policy makers say the language used by researchers is a barrier for busy lawmakers without a scientific background. "I remember sitting in a meeting with legislators and researchers, and they were explaining something very important," recalled Rep. Faircloth. "The other legislator leaned over to me and asked, 'Do you know what the n = sign means?' No, I didn't. But we both nodded sympathetically." In addition, research papers often put an emphasis on methodology, and explain results and conclusions at the end—when policy makers want results up front. The gulf in language and style is best bridged with an effective Executive Summary that highlights the most important research results in everyday language, and uses simple charts, graphs, and maps. While such summaries should be simple, they should also be frank—and not hide or dismiss the limitations of the findings.

Executive Summaries are most effective when they include policy recommendations. While researchers may be hesitant to take a policy position, they can work effectively with advocacy organizations and policy experts to deliver a set of reasonable policy choices to elected officials. Don Chen, Executive Director of Smart Growth America, has written extensively on transportation and land use research and policy. He notes, "We regard research as instrumental in shaping good policy. We let [academic researchers] do the heavy lifting, while we tend to do more analysis. We take the research that is out there and package and deliver it to policy makers so they are hearing what is going on in the research world and what the recommendations are."

Perhaps most importantly, research should be framed in human terms. "That's what I want to be involved with as a legislator," said Rep. Faircloth. "I want to try to do something that makes our society better, into a more compassionate and decent place. And if you can come forward with a piece of research and then tie it to that motivation, I think you will have people who have open ears and want to listen."

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