



The 2004-2005 Progress Report  
of the  
**The National Center for Smart Growth  
Research and Education**  
at the  
University of Maryland

in cooperation with

The School of Architecture, Planning and Preservation \*

\* The College of Agriculture and Natural Resources \*

\* The School of Engineering \* The School of Public Policy



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## ***Message from the Executive Director ....***

Thank you for taking time to examine the second progress report of the National Center for Smart Growth Research and Education. Although the Center is still quite young, it has made great strides toward its mission of becoming a national and international leader in research and education on the topic of smart growth. Since the last progress report, published in January 2004, Center staff have made important contributions to scholarship on a variety of topics, played significant roles on local planning and development initiatives, and helped educate a new generation of leaders on smart growth related topics.

Since the last progress report, the Center has added four new members to its staff. Starting in academic year 2005/06, Kelly Clifton will move from the School of Engineering to hold a 25 percent appointment in the Center and a 75 percent appointment in the Urban Studies and Planning Program. Jim Cohen will hold a 15 percent appointment in the Center and an 85 percent appointment in Urban Studies and Planning. Glenn Moglen will hold a 25 percent appointment in the Center and a 75 percent appointment in Civil Engineering. And, former Dean of the School of Architecture, Planning and Preservation, Steve Hurtt, will hold a 25 percent appointment in the Center and a 75 percent appointment in the Architecture program.

Research remains the primary area of emphasis and productivity. In 2004, Center staff published 12 papers in scholarly journals and had 16 published in 2005 or accepted for future publication. Twenty papers are in review. Also in 2004, Center staff published four chapters in books (eight forthcoming) and are editing or co-editing eight complete books. Further, staff in 2004 and 2005 published more than 19 working papers, professional reports, non-refereed articles, and other publications. This impressive body of work has been supported by more than \$1.5 million in grants and contracts from a diverse list of organizations that includes the Robert Wood Johnson Foundation, Lincoln Institute of Land Policy, U.S. Department of Housing and Urban Development, Urban Land Institute, Maryland-National Capital Building Industry Association, Homebuilders Association of Maryland, National Endowment for the Arts, U.S. Environmental Protection Agency, and others.

Interesting and important projects are underway in each of the Center's program areas. In the area of Transportation and Public Health, for example, projects funded by the Robert Wood Johnson Foundation involve quantification of concepts in urban design, identifying the environmental determinants of physical activity in adolescents and adults, and developing a guide for traffic calming based on international

case studies. One or more members of the Center staff have been on successful teams in three of four highly competitive rounds of funding by the Active Living Research program of the Robert Wood Johnson Foundation. In addition, projects funded by the Maryland Department of Transportation and the New Jersey Department of Transportation are advancing techniques in pedestrian modeling and context sensitive highway design, respectively. Finally, the Center recently joined researchers at Stanford University, San Diego State University and the University of British Columbia on the Neighborhood Quality of Life Study project funded by the National Institutes of Health. This project involves an examination of the relationship between physical activity and urban form in selected sites in Seattle and Baltimore.

Several projects also continue in the area of Land Use and Environment. With funding from the Lincoln Institute of Land Policy and the Brookings Institution, Center staff continue to develop and apply new ways of measuring urban form. This work, and previous work by Reid Ewing on Measures of Sprawl, has made the Center a national leader in efforts to quantify urban form. Closely related are the Land Market Monitoring and Maryland Indicators projects, also funded in part by the Lincoln Institute, the National Association of Realtors, and the National Association of Home Builders. These projects are establishing seminal approaches to understanding urban development patterns and the efficacy of land use policy. A Guidebook on how to conduct a residential capacity analysis was recently co-published by the Center, the Lincoln Institute, and the Maryland Department of Planning. Center staff have also made important new contributions to the debate over urban growth boundaries and the political economy of urban growth management

Center projects in the area of Housing and Community Development will soon produce important contributions to knowledge on regulatory barriers to affordable housing. Two projects funded by HUD, Fannie Mae, and the Lincoln Institute examine the effects of zoning ordinances and subdivision regulations on housing affordability, respectively. The former uses GIS data from six metropolitan areas and the latter involves collecting subdivision regulations from several hundred local governments. Collaborators on these projects include the American Planning Association and ECONorthwest, a Eugene, Oregon, consulting firm. A project on the efficacy of adequate public facilities ordinances, funded by the Homebuilders Association of Maryland and the Maryland National Capital Building Industry Association, is certain to make influential contributions to the sparse literature on these land management instruments.

International Development work at the Center continues to be dominated by the China Land Policy Program led by Chengri Ding and funded by the

Lincoln Institute. Projects include technical assistance to the Beijing Planning Commission, a farmland preservation demonstration project co-sponsored by China's Ministry of Land Resources, and seminars and workshops on property taxation co-sponsored by China's State Administration of Taxation. Additional contributions to the Center's international program include an international conference on "the Role of States and Nation-states in Smart Growth Planning," co-sponsored by the Dutch foundation, Habiforum, as well as ongoing work with the MILU [Multifunctional and Intensive Land Use] Network of European towns and cities. Finally, the Center hosted two international visiting scholars: Yajun Wang from the Beijing Planning Commission and Mirjam Bult-Sperling, from the Twente University in the Netherlands.

The education mission was well served by another successful Smart Growth Leadership Program, several workshops on Land Market Monitoring, and various training sessions for young scholars and government officials in the People's Republic of China. Now, after launching the Governors Institute on Community Design with the Smart Growth Leadership Institute, the Center's education reach will extend to governors and their top state government staff around the country.

Finally, Center staff continue to make significant contributions in Outreach and Service. Center staff and graduate assistants played a critical role in the Reality Check exercise recently conducted in Washington, D.C. This exercise, which involved 300 community leaders from across the Washington metropolitan area, gave the Center a unique opportunity to demonstrate its technical capacities before a large and influential audience. Center staff also conducted studies and served on panels that evaluated the Intercounty Connector, the highly controversial new east-west highway planned across Montgomery County. In addition, Center staff regularly serve as referees for a variety of journals and serve as an associate editor on the editorial board of the *Journal of the American Planning Association*. Finally, Center staff have made given countless professional talks and presentations — all over the world.

All in all, the Center has had its most productive year yet. Although the staff is small, it has — with the assistance of students in the Schools of Architecture, Planning and Preservation, Public Policy, Agriculture and Natural Resources, and Engineering -- made important scholarly contributions to issues in smart growth in Maryland, the United States, and around the world. As the size of the staff and the depth of the staff's experience continues to grow, so will the Center's reputation as a leader in research and education on issues related to smart growth.

Gerrit Knaap  
August 2005

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## **I. HISTORY**

The National Center for Smart Growth Research and Education (hereafter, the Center) was established in 2000 as a direct result of the rapidly expanding national and international interest in improving land use management through efforts collectively known by the term “Smart Growth.” The Center is a cooperative venture of four schools on the University of Maryland’s College Park campus: Agriculture and Natural Resources; Architecture, Planning and Preservation; Engineering; and Public Policy. The Center was created in no small part due to the national reputation of the State of Maryland’s 1997 Smart Growth and Neighborhood Conservation program and a desire by the University to build on the national and even international visibility of that effort.

The concept of a Center for Smart Growth originated with university faculty, who saw both a need and an opportunity to develop an objective, interdisciplinary approach to better understand the complex Smart Growth strategies sweeping the nation at the advent of the 21<sup>st</sup> century. From the outset, the Center was envisioned as an institution that would assess, and assist where possible, the implementation of the Maryland Smart Growth initiative, but which also would become a national resource for research and education on Smart Growth or related land use strategies.

Gerrit-Jan Knaap, a 25-year student of land use policy and author of more than 40 articles and five books on state and local land use planning, was recruited in 2002 from the University of Illinois at Champaign-Urbana to be the Center’s Executive Director. John W. Frece joined the staff in 2003 and became Associate Director in 2004.

The number of faculty researchers at the Center has steadily expanded. Initially, Knaap was assisted by post-doctoral research associates Yan Song and Jungyul Sohn, who have since moved on to faculty positions at universities in North Carolina and Tennessee, respectively. In 2003, Chengri Ding and Reid Ewing became members of the Center faculty and were joined by Antonio Bento in 2004.

Longtime Center affiliates, James R. Cohen, Kelly J. Clifton, Glenn Moglen and Steve Hurtt, the former dean of the School of Architecture, Planning and Preservation, joined the Center staff in 2005. Knaap, Ding, Ewing, Clifton, Cohen and Hurtt each hold joint appointments with the School of Architecture, Planning and Preservation; Bento holds a joint appointment with the School of Public Policy; Moglen holds a joint appointment with the Department of Civil and Environmental Engineering.

The Center's goals are two-fold:

- (1) To fill critical gaps in the research and available data on the underlying assumptions and effects of "Smart Growth," including the effectiveness of state and local growth management initiatives; and,
- (2) To fill an equally critical gap in available education and training for decision makers who need new ideas and tools for adopting cross-disciplinary and integrated approaches to managing growth, planning their land use, problem solving and implementation.

## **II. MISSION STATEMENT**

The mission of the Center is to help the University of Maryland become nationally and internationally recognized as a leader in Smart Growth research and education.

The Center does this by bringing the diverse resources of the University of Maryland, and a network of national experts, to bear on issues of land development, resource preservation and urban growth through interdisciplinary research, outreach and education. This approach recognizes that work on these interwoven issues directly affects the nature of our communities, our landscape and environment and, ultimately, our quality of life.



### **III. HIGHLIGHTS OF 2004-2005**

Faculty and staff at the National Center for Smart Growth Research and Education were busy on many fronts in 2004-2005 as the Center as a whole emerged from its start-up phase into a fully engaged, active and expanding research and education unit of the University of Maryland.

#### ***Reality Check***

The Center gained broad recognition throughout the Washington region through its participation in a regional planning exercise called “Reality Check – Envisioning Our Region’s Growth.” A Smart Growth Center team led by Executive Director Gerrit Knaap and that included Associate Director John W. Frece, doctoral candidate Arnab Chakraborty and a group of Center graduate assistants was responsible for data collection, base map preparation and computerizing, analyzing and presenting the results of the event. Reality Check, co-sponsored by the Urban Land Institute’s Washington Council, the Smart Growth Alliance, and Fannie Mae, was held in Washington, D.C., on February 2, 2005.

#### ***Public Health and the Built Environment***

Center and affiliated faculty also worked on a variety of research projects, including several exploring the relationship between public health and the built environment. Two members of the Center faculty, Associate Professor Reid Ewing and Assistant Professor Kelly J. Clifton, and Center’ affiliate, Assistant Professor Carolyn C. Voorhees of the Department of Public and Community Health, are involved in four separate Robert Wood Johnson Foundation-funded research projects that explore the linkages between spatial development patterns, physical activity and public health. This emerging area of research is rapidly becoming a specialty at the Center.

Ewing is also finishing up work measuring urban design qualities related to the characteristics that make communities walkable, such as human scale, transparency and complexity. These are qualities deemed by urban designers to be important for active street life.

During the course of the past year, Ewing was named as an associate editor of the *Journal of the American Planning Association*. He also was appointed as a Fellow at the Urban Land Institute in Washington, D.C.

#### ***Zoning and Land Use Research***

Knaap, Cohen and other faculty and affiliates also worked on research projects trying to determine if zoning is a barrier to the provision of affordable housing, to identify the impacts of adequate public facilities ordinances on growth patterns, and to develop methods of implementing context sensitive design for major urban thoroughfares. Work also

continued on older projects to develop performance benchmarks for the Maryland Smart Growth program, to draft a guidebook to assist local jurisdictions in estimating their future development capacity, and to assist several metropolitan areas around the nation as they develop methodologies for monitoring land use within their jurisdictions.

### ***China Land Policy Program***

Associate Professor Chengri Ding expanded his work on land use issues in China on behalf of the Lincoln Institute of Land Policy in Cambridge, Mass., and is fast emerging as an international expert on China land use policy. This effort has involved work with Beijing planners on a revision of the city's comprehensive plan and training sessions for Chinese officials in both China and the United States. One group of Chinese tax officials attended a week-long training session on the topic of property taxation hosted by Ding and the Lincoln Institute in Massachusetts and Maryland. Ding and Knaap also made several related trips to China during 2004 and 2005. Ding has been invited to deliver the keynote speech at a conference in Land Policy and Management in Taiwan in November 2005.

### ***International Planning Conference***

In Fall 2004, the Center hosted its first international planning conference in Annapolis, Md. Entitled, "Incentives, Regulations and Plans: The Role of States and Nation-States in Smart Growth Planning," the conference revolved around the presentation of papers from a dozen European and North American researchers paired on six topics: containing sprawl; mixed use development; transit oriented development; affordable housing; healthy urban designs; and, marketing Smart Growth. Each academic researcher was teamed with a counterpart expert from abroad, both of whom were asked to prepare a paper on the same symposium topic.

The symposium, organized primarily by Frece and Molly Martin, attracted nine Europeans from six nations, two Canadians, and 34 from six states and the District of Columbia in the United States. The papers now are being revised and edited and will be produced in a book to be published, probably in 2006.

Immediately prior to the symposium, the Center hosted a debate on the University of Maryland campus that posed the questions: "Is urban sprawl really a problem?" And, "If it is, is Smart Growth the right solution?" Two veteran land use researchers who have tangled over this high profile issue in the past – Reid Ewing, a research professor at the Center, and Harry Richardson, the James Irvine Chair in Urban and Regional Planning of the University of Southern California -- were reunited to debate the smart growth issues. They were joined by James

R. Cohen from the Urban Studies and Planning Department and by Robert Nelson, a Center affiliate, professor of environmental policy in the School of Public Policy and long-time advocate of private approaches to land use management.

### ***Governors' Institute on Community Design***

One of the most exciting new opportunities for the Center is a collaborative project with the Smart Growth Leadership Institute in Washington, D.C., to develop and implement a new Governors' Institute on Community Design. This project, sponsored by the National Endowment for the Arts and the U.S. Environmental Protection Agency, is roughly modeled after NEA's successful Mayor's Institute on City Design. The Smart Growth Leadership Institute is headed by former Maryland Governor Parris N. Glendening and former Maryland Special Secretary for Smart Growth, Harriet Tregoning. Frece and Knaap will head the National Center for Smart Growth team on this project.

Frece is also nearing the completion of a book on the political history of the Maryland Smart Growth initiative, which should be forthcoming in 2006. Knaap, Cohen and Frece, meanwhile, are working on a companion book that will analyze the effectiveness of the Maryland program.

### ***Smart Growth Leadership Program***

In Spring 2004 and 2005, the Center again offered its Smart Growth Leadership Program. The week-long program was led by Judy Brown, a faculty member in the School of Public Policy who also heads the Center's education and outreach efforts. She was assisted by Cohen and Frece. The classes attracted participants from Maryland, the District of Columbia, Michigan, Pennsylvania, Rhode Island, North Carolina and Washington state, from federal, state and local governments, and from the private sector. The Spring 2005 course marked the sixth consecutive year that the University of Maryland has offered this leadership training on smart growth issues.

## **IV. PROJECTS**

### **A. Land Use and the Environment**

#### **Governor's Institute on Community Design**

In 2005, the National Endowment for the Arts and the U.S. Environmental Protection Agency selected a team composed of the Smart Growth Leadership Institute in Washington, D.C., and the University of Maryland's National Center for Smart Growth Research and Education, to develop and implement a new program designed to educate, inform and assist the nation's governors on issues related to land use and community design. This new enterprise, the Governor's Institute on Community Design, will be modeled in part after NEA's successful Mayor's Institute on City Design.

A kick-off event featuring former Governors Parris N. Glendening of Maryland and Christine Todd Whitman of New Jersey was held in Washington, D.C., in July 2005. Initial plans call for as many as three workshops with individual governors around the country in 2005 and 2006. These workshops will be in each governor's home state and efforts will be made to balance the governors who are selected by geography, political party and ability to accomplish land use change.

#### **Measures of Urban Sprawl**

Public Policy Professor Antonio M. Bento is also working on two projects related to the measurements of sprawl. One, entitled, "The Dimensions of Urban Sprawl: Evidence from the 2000 Census," was submitted to the *Journal of Policy Analysis and Management* in July 2005.

The other, called, "The Impacts of Urban Sprawl on Community Participation and Civic Engagement," is being done in cooperation with Mark Lopez and is to be submitted to the *Journal of Public Economics* by December 2005.

#### **National Land Market Monitoring Project**

Despite the withdrawal of financial support from the U.S. Department of Housing and Urban Development, the Center under the guidance of Executive Director Gerrit Knaap continued its effort to develop a national Land Market Monitoring demonstration project. The project continues to receive strong support from the Lincoln Institute of Land Policy in Cambridge, Mass.

Working with regional organizations and planning officials from the state of Maryland, St. Paul, Minnesota, Sacramento, California, Orange County, Florida, and Portland, Oregon, the Center is providing training, guidance and coordination on how to develop, implement and utilize a

land monitoring system. Partners in this project met to exchange information and ideas at meetings in St. Paul, Minnesota, and in Sacramento, California.

A meeting in fall 2005 is tentatively planned in Orange County, Florida, or elsewhere on the East Coast.

### **North St. Lucie Master Plan Implementation**

Associate Professor Reid Ewing is working with the Treasure Coast Regional Planning Council in Stuart, Florida, on a project to implement the North St. Lucie Master Plan. This project is expected to be completed by the end of 2005.

### **Political Economy of Environmental/Urban Regulation**

Public Policy Professor Antonio M. Bento has worked on two projects related to the political economy of environmental/urban regulation. One, entitled, “The Determinants of Urban Growth Boundaries Adoption: A Political Economy Approach,” is to be submitted to the *Journal of Urban Economics* by September 2005.

The other, entitled, “The Spatial Distribution of Toxics: Evidence from California Cities,” is being researched in cooperation with Maximilian Aufhamer and is to be submitted to the *Review of Economics and Statistics* by September 2005.

### **Reality Check: Envisioning Our Region’s Growth**

Faculty, staff and students at the University of Maryland’s National Center for Smart Growth Research and Education were actively involved in the successful Washington regional visioning exercise called “Reality Check – Envisioning Our Region’s Growth.” Co-sponsored by the Urban Land Institute’s Washington Council, the Smart Growth Alliance, Fannie Mae and the Fannie Mae Foundation, the event was held at the Ronald Reagan Building in Washington, D.C., on February 2, 2005.

During the morning-long exercise, the event’s 300 participants placed Lego® blocks representing population and employment on a regional map in an attempt to decide where the 2 million people and 1.6 million jobs that are expected to come to the Washington region in the next 25 years should go. The participants – leaders from throughout the region who were specifically invited to attend and play the visioning game – included an almost equal number of elected officials, civic leaders and business people from Washington and 21 surrounding jurisdictions.

When the exercise was over, every block that was played was counted and recorded in computers. Doctoral candidate Arnab Chakraborty and his University of Maryland team then converted the results into 2-D and 3-D maps for each table, analyzed results and

prepared to display maps showing which tables placed the most jobs or households close to transit, the most inside the Capital Beltway, and the most inside and outside the Washington area's "urban envelope." Executive Director Gerrit Knaap presented the results to an audience of approximately 800 assembled in the building's amphitheater.

The Center team was responsible for data collection, complete preparation of the base map used in the game, and computerizing, analyzing and presenting the results of the event. Frece also served on the event's public relations and invitations committee.

The Center now is working with other jurisdictions in Maryland, Virginia and West Virginia about the possibility of assisting with Reality Check-style events in those areas. The Center also expects to be involved in follow-up activities from the original Reality Check event in the Washington, D.C., region.

## **B. Transportation and Public Health**

### **Economic Impact Study of the Intercounty Connector**

The Maryland State Highway Administration commissioned a study led by Dr. Hani Mahmassani and Dr. Kelly J. Clifton to examine the economic impacts of investments in highway infrastructure. The study, Economic Impacts of the Inter-county Connector, examined the impacts of building this facility on travel time savings, reliability and firm location in a four county area in suburban Maryland. The Inter-county Connector highway is proposed for construction between I-270 in Montgomery County, Md., and I-95 in Prince George's County. This project was part of a larger Environmental Impact Statement on the proposed highway being conducted by the Maryland Department of Transportation.

### **Environmental Innovations: Development & Transportation**

Dr. Reid Ewing is working under a contract with the U.S. Environmental Protection Agency to provide the Development, Community and Environment Division (DCED) at EPA with technical support regarding the impacts of current development patterns, alternative forms of development, mechanisms that encourage smart growth, and improved management of community resources and growth. DCED is home to EPA's Smart Growth program.

### **Guidance for Context Sensitive Design of Major Thoroughfares**

Dr. Reid Ewing and a team from the Institute of Transportation Engineers and the Congress for the New Urbanism are developing street design guidelines for major thoroughfares in the United States. The guidelines are meant to supplement the American Association of State

Highway and Transportation Officials' *A Policy on Geometric Design of Highways and Streets* (more widely known as "the Green Book"). The emphasis of this project is to proscribe ways to better accommodate pedestrians, bicyclists and transit users.

### **Measuring Urban Design Qualities: An Illustrated Field Manual**

This manual, prepared by Dr. Reid Ewing and others for the Robert Wood Johnson Foundation's Active Living Research Program, is the result of a study of the urban qualities related to walkability and builds on the evidence that shows the linkage between the built environment and physical activity.

Previous studies have looked generally at the built environment by reviewing general qualities such as density and street connectivity. This report, however, focuses on subtler characteristics that may influence choices about active travel and active leisure time. Moreover, it provides users of the manual with guidance on how to objectively measure each quality for a typical street. Based on this research, the urban design qualities measured in this manual appear to have significant relationships to walkability and great potential to be measured objectively and reliably.

Also participating in this project were Otto Clemente from the University of Maryland's National Center for Smart Growth, Susan Handy from the University of California, Davis, and Ross Brownson from Saint Louis University.

### **Modeling Pedestrian Route Choices: The Influence of Environmental Factors**

Assistant Professor Kelly J. Clifton headed a research project in which an audit instrument and protocol for the pedestrian environment was developed and tested in the summer of 2004. Dr. Clifton advised a team of six undergraduate students from around the country, who participated in the Research Internships in Science and Engineering (RISE) Program funded by the National Science Foundation and administered through the University of Maryland Clark College of Engineering. This all-women research team designed, tested and administered the audit in communities in Maryland and North Carolina using technology such as PDAs, geographic positioning systems (GPS) and geographic information systems (GIS).

### **Pedestrian Safety Modeling: Forecasting Pedestrian Volumes**

Another project related to pedestrian issues and funded by the Maryland State Highway Safety Office is designed to develop a

methodology to estimate the pedestrian demand at intersections in order to better evaluate pedestrian risk exposures.

The University of Maryland project team, led by Dr. Gerrit Knaap and Dr. Kelly J. Clifton, is working closely with Urbitran Consultants to produce a detailed model of pedestrian demand and apply the model to areas in Baltimore City and around Langley Park, Md. Also related to pedestrian safety is a study of pedestrian crashes in Baltimore City and their associations with personal and environmental factors.

### **Study of Sprawl and Obesity in Children**

The current epidemic of obesity is having an important impact on youth as well as adults. There is substantial interest in the potential of the built environment to influence levels of obesity. A number of studies in this area have already been supported by the National Institutes of Health and other funding agencies; however, most of these studies have focused on adults and have involved cross-sectional analyses of survey data.

This project involves an effort to analyze longitudinal data concerning obesity and physical activity for a sample of youth in relation to characteristics of the built environment. Specifically, data from the National Longitudinal Survey of Youth from the U.S. Bureau of Labor Statistics include measures of height, weight and county of residence as well as questions about physical activity and television viewing.

Dr. Reid Ewing, the principal investigator, has developed techniques for estimating levels of urban sprawl in U.S. counties. His published work demonstrates that sprawl is associated with decreased levels of physical activity and increased Body Mass Index in U.S. adults. This analysis will provide unique and important insights into the impact of the built environment on obesity and on physical activity in youth.

### **Testing Associations Between Physical Activity and the Built Environment**

Dr. Kelly J. Clifton is involved with two research studies investigating links between the built environment and levels of physical activity, both funded by the Robert Wood Johnson Foundation's Active Living Research Program. The first is examining exercise and physical activity patterns among adults in Montgomery County, Md., with a study team based at the University of North Carolina lead by Dr. Daniel Rodriguez. The second focuses on similar issues among the adolescent population Baltimore, Md., and is led by Dr. Carolyn Voorhees of the Department of Public and Community Health at the University of Maryland and an affiliate of the Center.



### **Traffic Calming Case Studies**

Dr. Reid Ewing is leading a study to evaluate the policy innovation of “traffic calming” to determine the effect on physical activity. “Traffic calming” refers to the use of a variety of design interventions to make streets safer and more livable by slowing traffic and reducing volumes. This project is funded through the Robert Wood Johnson Foundation’s Active Living Research Program, Round 4.

Two factors make the “traffic calming” innovation relevant and significant to active living. One is the rapidity with which traffic calming has entered the transportation planning and engineering mainstream as interest grows in the notion of comprehensive “healthy community design.” The other factor is the complex relationship of traffic calming to active living.

Several studies in the U.S., as well as the European experience with monitoring the impacts of traffic calming, suggest that walking and biking activity increases in traffic calmed neighborhoods. The exponential expansion of traffic calming policies throughout the U.S. suggests the potential for this policy innovation to be extended to new locations, in a larger variety of settings, with a corresponding increase in impact on highly diverse populations.

The results of this study will be broadly disseminated, exploiting the research team's on-going access to a national audience of planners, engineers and health professionals.

### **Traffic Calming Guidelines**

In this project, Dr. Reid Ewing is developing traffic calming guidelines for Sacramento County, California. The project includes a survey of 20 leading jurisdictions to see how policies and practices have changed since the mid-1990s, when the principal investigator conducted surveys for the national traffic calming guide, *Traffic Calming State-of-the-Practices*.

## **C. Housing and Community Development**

### **Adequate Public Facilities Ordinances**

Urban Studies and Planning Professors Gerrit Knaap and James R. Cohen and Public Policy Professor Antonio M. Bento are working on a pair of research projects involving investigations into the implementation of adequate public facility ordinances (APFOs) in 14 counties in Maryland’s Washington suburbs and in the metropolitan Baltimore area. Funded, respectively, by the Maryland-National Capital Building Industry Association and the Home Builders Association of Maryland, the project seeks to determine the variety of APFOs in use in Maryland and their

ultimate effect on the timely provision of infrastructure and growth patterns in the state.

### **Development Capacity Guidebook**

In 2004, Center Executive Director Gerrit Knaap was appointed by the Governor to serve on a Development Capacity Task Force charged with the responsibility of developing a standardized method for Maryland counties and cities to use in estimating future development capacity.

As an outgrowth of this work, the Center in conjunction with the Maryland Department of Planning is developing a guidebook that will outline the steps that local governments must take to estimate future development capacity. The guidebook will be made available to local government officials throughout Maryland.

### **Evaluation of Growth Controls**

Public Policy Professor Antonio M. Bento is working on a research project entitled, "The Impacts of Urban Growth Boundaries on Housing Prices: Evidence from California Cities." This work was submitted to the *Journal of Environmental Economics and Management* in July 2005.

### **Subdivision Controls as a Regulatory Barrier to Affordable Housing**

The purpose of this project, which is funded by the U.S. Department of Housing and Urban Development, is to assess the occurrence and magnitude of subdivision controls as a regulatory barrier to affordable housing. A federal study in 1991 found that exclusionary, discriminatory, and unnecessary regulations are significant barriers to affordable housing. These barriers deter the development of housing within the means of lower-income families, causing them to locate farther away from potential job markets. Subdivision regulation is one form of land use control that was identified in the report as a major factor in increasing the price of housing and limiting the supply.

While earlier studies addressed the overall problem or its specific facets, broader-scope research into the current state of subdivision regulatory barriers can assess the magnitude of their impact.

There are differences throughout the U.S. on how much authority each state gives its municipalities in land regulation. Subdivision regulations have evolved from their principal focus on land subdivision control to their use in spearheading efforts to manage growth and protect the environment. Growth management is addressed by linking approval of subdivisions to the local government's schedule for the construction of capital improvements. Dr. Gerrit Knaap is the lead investigator for the NCSG.

## **D. International Urban Development**

### **Program in Chinese Land and Urban Development**

Under the sponsorship of the Lincoln Institute of Land Policy, Dr. Chengri Ding has developed a comprehensive program in Chinese Land and Urban Development. The program includes the development of specific tools for Chinese urban planners, technical assistance, conference presentations, and a variety of training exercises. Some of these activities are described here and others in Section VI (Education and Training) below.

### **Guidebook of Urban Planning Practice in a Transitional Economy**

Working with the Lincoln Institute of Land Policy through the Center's China Land Policy Program, Dr. Chengri Ding has developed a *Guidebook of Urban Planning Practice in a Transitional Economy* to assist the Chinese adjust to land use changes as the nation moves from a managed economy to a market economy.

### **Technical Assistance to Beijing Urban Plan Revision**

As part of the Lincoln Institute of Land Policy's China Policy Program at the University of Maryland, Dr. Chengri Ding is working with the Beijing Urban Planning Commission to revise and update the comprehensive plan for the city of Beijing. This project has incorporated the use of GIS software tools to help identify various planning scenarios that city planners could pursue.

## **E. Projects Related to the State of Maryland**

### **Climate and Land Use in the Mid-Atlantic**

Prior to joining the Center faculty as associate research scientist, Glenn Moglen was the co-principal investigator (with Margaret Palmer from the Department of Biology, Nancy Bockstael from the Department of Agricultural Economics, and James Pizzuto from the University of Delaware, in a project entitled, "Jointly Changing Climate and Land Use in the Mid-Atlantic: Modeling Drivers and Consequences in Economics, Hydrology, Geomorphology, and Ecology." Funded by the U.S. Environmental Protection Agency beginning in July 2002, the project is expected to be concluded in December 2005.

### **Hydrology and State Highways**

Associate Research Scientist Glenn Moglen is also the principal investigator on two projects funded by the Maryland State Highway Administration. In the first, he serves on the Maryland State Highway Hydrology Panel. The second project is entitled, GISHydro2005. The latter project involves the ongoing development of a GIS-based tool that automates the hydrologic analysis of any arbitrarily selected watershed in the State of Maryland. Further, a web-based version of this program is currently nearing completion. For more information on this project please visit: <http://www.gishydro.umd.edu>.

### **Impacts of Crime on Communities**

Public Policy Professor Antonio M. Bento is working with Shawn Bushway on a research project entitled, "The Impact of Crime on Urban Flight: Evidence from Baltimore City." This work was submitted to the *Journal of Urban Economics* in July 2005.

### **Maryland-Virginia Land Use Governance Study**

Urban Studies and Planning Professor James R. Cohen led a study of issues related to local governance of land development. The 2004-2005 project, supported by the Asian Development Bank, focused on the governance of land development in Fairfax County, Virginia, and Montgomery County, Maryland, neighboring jurisdictions from different states separated by only the Potomac River.

### **Maryland Smart Growth Indicators Project**

During 2004-2005, a pair of Center graduate assistants, Laurel Davis and Megan McElroy, completed work collecting data for a variety of performance indicators related to the Maryland Smart Growth initiative. This information is now being analyzed for use in a baseline report that will set benchmarks for the various indicators, against which change in future years can be measured.

This project has been assisted by the Maryland Department of Planning, which has helped collect much of the data for the benchmark report. The report is expected to be published before the end of 2005.

### **Smart Codes – Healthy People, A Smart Step Forward**

Assistant Professor Kelly J. Clifton continues to lead the Smart Step Forward project funded by the Robert Wood Johnson Foundation.

This project, originally launched in 2001 by the Governor's Office of Smart Growth, has created pilot projects in three Maryland communities: College Park in Prince George's County, Bel Air in Harford

County, and Turner's Station in Baltimore County. The project has included community surveys about walking, audits of local zoning and subdivision codes, public workshops and implementation projects. The study is focused on associating pedestrian behavior with objective and perceived measures of the built environment.

## **V. PAPER AND PUBLICATIONS**

### **A. PUBLISHED WORKS IN 2004**

#### **Articles in Refereed Journals**

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Ding, Chengri. 2004. Is the Population Density of Chinese Cities High? *City Planning Review*. 199 (8): 43-48 (in Chinese).

Ding, Chengri. 2004. Spatial Structure and City Competitiveness. *ACTA Geographica Sinica*. 59: 85-92 (in Chinese).

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Hopkins, Lewis D., Xiaohuan Xu, and Gerrit-Jan Knaap. 2004. Economies of Scale in Wastewater Treatment and Planning for Urban Growth. *Environment and Planning B: Planning and Design*. 31: 879-93.

Moglen, G.E., S.A. Gabriel, J. Faria, (in press). "A Multiobjective Optimization Approach to Smart Growth in Land Development." *Socio-Economic Planning Sciences*.

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Moglen, G.E., N.E. Allmendinger, J.E. Pizzuto, and M. Lewicki, (in review). "A Sediment Budget for an Urbanizing Watershed." Submitted

to the *Journal of the American Water Resources Association* (April 2005).

Song, Yan and Gerrit-Jan Knaap. 2004. Are Mixed Land Uses Marketable: Reexamining Consumers' Preferences. *Regional Science and Urban Economics*. 34 (6): 663-80.

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Clifton, Kelly J. and Karen Lucas. 2004. Chapter 2: Examining The Empirical Evidence of Transport Inequality in the USA and UK. In *Running on Empty*, ed K. Lucas, The Policy Press: Bristol, UK.

Knaap, Gerrit-Jan. 2004. Comment in *Growth Management and Affordable Housing*, ed. Anthony Downs. Brookings Institution: Washington, DC.

Moglen, G.E., K.C. Nelson, M.A. Palmer, J.E. Pizzuto, C.E. Rogers, and M.I. Hejazi. (2004). "Hydro-Ecologic Responses to Land Use in Small Urbanizing Watersheds Within the Chesapeake Bay Watershed" in R. DeFries, G. Asner, and R. Houghton (eds.) *Ecosystems and Land Use Change*. Geophysical Monograph Series, American Geophysical Union, Washington, D.C. 153: 41-60.

### **Monographs, Reports, Working Papers, Articles, and other Publications**

Clifton, Kelly J., Hani S. Mahmassani, Carolina Burnier, Yeonjoo Min, Colleen Mitchell, and Felipe Targa. 2004. *Economic Impact Study of the Intercounty Connector*. Report for the Maryland Department of Transportation, State Highway Office: Hanover, MD. Available online at: <http://www.mti.umd.edu/research/recentResearch.htm#ICC>

Frece, John W. 2005. *Twenty Lessons from Maryland's Smart Growth Initiative*, Vermont Law Journal, Vol. 6, 2004-05.

Lichtenberg, Eric. and Chengri Ding. 2004. *Farmland Preservation in China: Status and Issues for Further Research*. Report for the Lincoln Institute of Land Policy: Cambridge, MA.

Knaap, Gerrit-Jan and ECONorthwest. 2004. *An Evaluation of the Development Impacts of the Proposed Belleayre Resort in the Catskill Mountains of New York State*. Report for the Office of the Attorney General: New York State.

Knaap, Gerrit-Jan. 2004. *Monitoring Land & Housing Markets: An Essential Tool for Smart Growth*. Report for the National Center for Housing and the Environment: Washington, DC.

Ding, Chengri. 2004. The Effects of Land Acquisition on China's Economic Future. *Landlines*. January.

Ding, Chengri. 2004. Farmland Preservation in China. *Landlines*. June.

## **B. PUBLICATIONS IN 2005 AND FORTHCOMING WORKS**

### **Books and Books Edited**

Ding, Chengri. 2005. Translation of *Property Taxation and Local Government Finance*, author Wallace Oates. Science and Technology Press: China (translation into Chinese in progress).

Ding, Chengri. 2005. *Urban Economics and Urban Policy*. Science and Technology Press: China (in Chinese).

Ding, Chengri, Gerrit-Jan Knaap, and Terry Moore. (in Progress) *Urban Management and Land Policy: Planning in the Context of Market Forces*. Lincoln Institute of Land Policy: Cambridge, MA.

Ding, Chengri, Yan Song, Gerrit-Jan Knaap, and Y. Huang. 2005. *City Planning and Sustainable Spatial Structure*. Urban Construction Press: China (in Chinese).

Ding, Chengri and Yan Song. 2005. *The Evolution of Land and Housing Markets in the People's Republic of China*. Lincoln Institute of Land Policy: Cambridge, MA.

Ewing, Reid and S. Brown. (under contract). *Traffic Calming Manual*. American Planning Association: Chicago, IL.

Knaap, Gerrit-Jan, James Cohen, and John Frece. (in progress) *Smart Growth in Maryland: Looking Forward, Looking Back*.



Knaap, Gerrit-Jan, Huib Haccou, Kelly J. Clifton, and John Frece, ed.s. (in progress). *Incentives, Regulations, and Plans: The Role of States and Nation-States in Land Use Planning*.

Moglen, G.E. (2005). *Managing Watersheds for Human and Natural Impacts: Engineering, Ecological, and Economic Challenges*. Proceedings of the 2005 Watershed Management Conference. Environmental and Water Resources Institute of the American Society of Civil Engineers. ISBN 0-7844-0763-0.

Wiewel, Wim and Gerrit-Jan Knaap, eds. 2005. *Partnerships for Smart Growth: University-Community Collaboration for Better Public Places*. M.E. Sharpe: New York, NY.

### **Journal Articles**

Bento, Antonio, Lawrence Goulder, Emeric Henry, Mark Jacobsen and Roger Von Haefen. 2005. Distributional and Efficiency Impacts of Gasoline Taxes: An Econometrically-Based Multi-Market Study. *American Economic Review*. May.

Bento, Antonio, Maureen Cropper, Mushfiq Moborak and Katja Vinha. (forthcoming). The Impact of Urban Spatial Structure on Travel Demand in the United States. *The Review of Economics and Statistics*.

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- Ewing, Reid. 2005. Can the Physical Environment Determine Physical Activity Levels? *Exercise and Sport Sciences Review*. 69-75.
- Ewing, Reid, M. King, Steven Raudenbush, and Otto Clemente. (forthcoming) Turning Highways Into Main Streets: Two Innovations in Planning Methodology. *Journal of the American Planning Association*.
- Ewing, Reid, A. Hoyt, and S. Brown. (forthcoming). Traffic Calming Revisited. *ITE Journal*.
- Ewing, Reid. (forthcoming). Building Environment to Promote Health. *Journal of Epidemiology & Community Health*.
- Ewing, Reid, Otto Clemente, Susan Handy, Ross Brownson, and E. Winston. (forthcoming) Identifying and Measuring Urban Design Qualities Related to Walkability. *Journal of Physical Activity and Health*.
- Knaap, Gerrit-Jan and Emily Talen. 2005. Editor's Introduction in New Urbanism and Smart Growth: A Research Symposium Special Issue. *International Regional Science Review*.
- Sohn, Jungyul and Gerrit-Jan Knaap. (forthcoming) Maryland's Job Creation Tax Credit Program. *Economic Development Quarterly*.
- Song, Yan and Chengri Ding. (forthcoming) Evaluation of Atlantic City's Mass Transit System (MARTA). *Urban Studies* (in Chinese).
- Song, Yan and Chengri Ding. 2005. Declining of American City's CBDs. *Urban Planning Overseas*. (in Chinese).

### **In Review**

- Bento, Antonio. The Impact of Policies to Control Motor Vehicle Use in Mumbai, India. Submitted to *the Journal of Regional Science*.
- Bento, Antonio, Maximilian Aufhamer and Scott Lowe. What Drives the Changes in the Spatial Distribution of Particulate Matter in California Between 1990 and 2000? A Political Economy Approach. Submitted to the *Journal of Environmental Economics and Management*.
- Bento, Antonio, Maureen Cropper, and Akie Takeuchi. The Welfare Effects of Urban Land Policies on Slum Dwellers: The case of Mumbai. Submitted to the *Review of Economics and Statistics*.

- Bento, Antonio, Sofia Franco, and Daniel Kaffine. Revenue-Recycling and the Welfare Effects of Development Taxes. Submitted to the *Journal of Environmental Economics and Management*.
- Bento, Antonio and Mark Jacobsen. Natural Resources Rents and the Double Dividend Hypothesis. Submitted to the *Journal of Environmental Economics and Management*.
- Bento, Antonio, Scott Lowe, and Emeric Henry. The Political Economy of Environmental Regulation: Evidence from the Reclaim Program. Submitted to the *Journal of Environmental Economics and Management*.
- Brownson, Ross, C. Royer, and Reid Ewing. Epidemiologists and Policy Makers: Well-Intentioned Travelers in Parallel Universes. Submitted to the *American Journal of Preventive Medicine*.
- Clifton, Kelly J., Carolina Burnier, and Kandice Kremer-Fults. (under review). Women's Involvement in Pedestrian-Vehicular Crashes: The Influence of Personal and Environmental Factors. Presented at Research on Women's Issues in Transportation Conference, November 18-20, 2004, Chicago, IL.
- Clifton, Kelly J. and Jennifer Dill. (under review). Women's Travel Behavior and Land Use: Will New Urbanism Lead to More Women Walking?
- Clifton, Kelly J. and Kevin J. Krizek. The Utility of the NHTS For Understanding Bicycle And Pedestrian Travel", Submitted to the *Journal of Transportation Statistics*.
- Clifton, Kelly J. and Andréa D Livi. The Development and Testing of an Audit for the Pedestrian Environment. Submitted to the *Journal of the American Planning Association*.
- Ding, Chengri. Land acquisition and social conflict in China. Submitted to *Urban Studies*.
- Ding, C., Policy and Praxis of Land Acquisition in China, submitted to *Land Use Policy*.
- Ewing, Reid and Richard Kuzmyak. Comparing Forecasting Methods: Expert Land Use Panel vs. Simple Land Use Allocation Model. Submitted to *Environment and Planning B*.

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Knaap, Gerrit-Jan, Yan Song, Reid Ewing, and Kelly J. Clifton. Seeing the Elephant: Multi-disciplinary Measure of Urban Sprawl. Submitted to the *Journal of Planning Literature*.

Litchenburg, Erik and Chengri Ding. Assessment of Farmland Protection Policy in China. Submitted to *Land Use Policy*.

Livi, Andréa D. and Clifton, Kelly J. (under review). Gender Differences in Walking Behavior, Attitudes about Walking and Perceptions of the Environment in Three Maryland Communities.

Marco, Scuderi, and Kelly J Clifton. Bayesian Approaches to Learning from Data: Using NHTS Data for the Analysis of Land Use and Transportation. Submitted to the *Journal of Transportation Statistics*.

Song, Yan and Gerrit-Jan Knaap. Internally Connected, No Commercial, with a Touch of Open Space: the Neighborhoods of New Homes in the Portland Metropolitan Area. Submitted to the *Journal of Urban Design*.

Targa, Felipe and Kelly J. Clifton. The Built Environment and Trip Generation for Non-Motorized Travel. Submitted to *the Journal of Transportation Statistics*.

### **Chapters in Books**

Clifton, Kelly J. and Carolina Burnier. (forthcoming) From the Ground Up: Local land Use Policies, Transportation Choices, and the Potential for Improved Air Quality, Chapter 6 in *Regional Development, Infrastructure, and Adaptation to Climate Variability and Change*. Ed. M. Ruth. Edward Elgar Publishing: Northampton, MA.

Cohen, James R., Using a Studio Course for Provision of Smart Growth Technical Assistance: the University of Maryland's 1999 Community Planning Studio in Perryville, Maryland. Chapter 1 in *Partnerships for Smart Growth: University-Community Collaboration for Better Public Places*, (Wim Wiewel and Gerrit-Jan Knaap, eds.), Armonk, NY: M.E. Sharpe, 2004.

Ding, Chengri and Gerrit-Jan Knaap. 2005. Urban Land Policy Reform in China's Transitional Economy, a chapter in *Land and Housing*

*Markets in China*. Eds. Chengri Ding and Yan Song. Lincoln Institute of Land Policy: Cambridge, MA.

Ding, Chengri. (2005) Land Policy Reform in China: Historical Review, chapter in *The Evolution of Land and Housing Markets in the People's Republic of China*. Eds. Chengri Ding and Yan Song. Lincoln Institute of Land Policy: Cambridge, MA.

Knaap, Gerrit-Jan. (forthcoming). A Requiem for Smart Growth?, a chapter in *Planning Reform in the New Century*. Ed. Daniel R. Mandelker. American Planning Association: Chicago, IL.

Knaap, Gerrit-Jan and Yan Song. (forthcoming). *The Fruits of Growth Management in the Sunshine State: An Assessment of Urban Form in Orange County, Florida*. Eds. Charles Connerly and Tim Chapin. Devoe Moore Center: Tallahassee, FL.

Knaap, Gerrit-Jan and Yan Song. (forthcoming) *The Transportation-Land Use Policy Connection*. Eds. Kevin Krizek and David Levinson. The Transportation Center at the University of Minnesota: Minneapolis, MN.

Song, Yan and Gerrit-Jan Knaap. (forthcoming). Valuing Amenities of New Urbanist Communities, *Environmental Valuation: Intraregional and Interregional Perspectives*. Eds. John Carruthers and William Mundy. Ashgate Publishers: Hampshire, UK.

Song, Yan, Gerrit-Jan Knaap, and Chengri Ding. (forthcoming) Housing Policy in the People's Republic of China Since 1949, in *The Evolution of Land and Housing Markets in the People's Republic of China*. Eds. Chengri Ding and Yan Song. Lincoln Institute of Land Policy: Cambridge, MA.

### **Monographs, Reports, Working Papers, Articles, and other Publications**

Clifton, Kelly J., Gary Davies, William G. Allen, Noah Raford. 2005. *Pedestrian Flow Modeling for Prototypical Maryland Cities*. Project report for Maryland Department of Transportation, Maryland Highway Safety Office: Hanover, MD. Available online at: <http://www.smartgrowth.umd.edu>.

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report prepared for the Robert Wood Johnson Foundation: Princeton, NJ. Available on line at: <http://www.smartgrowth.umd.edu>

- Cohen, James, and Gerrit-Jan Knaap. 2005. *Planning and Development Control at the County Level in the United States: Lessons from Montgomery County, Maryland, and Fairfax County, Virginia*. Report submitted to The Asian Development Bank Government Finance and Trade Division East and Central Asia Department.
- Ding, Chengri, and Yan Song. 2005. *Beijing Report: Technical Assistance to Beijing Urban Planning Revision*. Lincoln Institute of Land Policy: Cambridge, MA.
- Ding, Chengri. 2005. Development of Property Taxation in China: Challenges and Prospects. *Landlines*.
- Ding, Chengri, Yan Song, and Gerrit-Jan Knaap. 2005. Envisioning Beijing 2020 through Sketches of Urban Scenarios. *Landlines*.
- Ewing, Reid, C. Forinash, and W. Schroeer. 2005. Travel and Emissions Impacts of Neighborhood Schools and Sidewalk Connections. *TR News*. 4-10.
- Ewing, Reid and J. Kostyak. 2005. *Endangered by Sprawl: How Runaway Development Threatens America's Wildlife*. National Wildlife Federation, NatureServe, Smart Growth America: Washington, D.C.
- Knaap, Gerrit-Jan, and Yan Song. 2005. *Measuring Patterns of Urban Development; New Intelligence for the War on Sprawl*. Working paper for Lincoln Institute: Cambridge, MA and Brookings Institution: Washington, DC.
- Knaap, Gerrit-Jan, Yan Song, Kelly Clifton, and Reid Ewing. 2005. *Seeing the Elephant: Multidisciplinary Approaches to Measuring Urban Sprawl*. Working paper for Lincoln Institute: Cambridge, MA and Brookings Institution: Washington, DC.
- Lintchenburg, Erik and Chengri Ding. 2005. Farmland Policy Farmland Preservation in China: Status and Issues for Further Research. *Landlines*.
- National Center for Smart Growth and Lincoln Institute of Land Policy. 2005. *Beijing 2030: An Evaluation of Alternative Growth Scenarios for the Capital of China*. Lincoln Institute: Cambridge, MA.

## **VI. EDUCATION AND TRAINING**

### **Land Use Planning for Economic Development Training Program**

Urban Studies and Planning Professor James R. Cohen, working under a grant from the Maryland Economic Development Association, co-designed and facilitated a training program on Land Use Planning for Economic Development. The program was held at Anne Arundel Community College at Arundel Mills, Maryland, on December 2-3, 2004.

### **Planning Commissioner Certificate Program**

Urban Studies and Planning Professor James R. Cohen continued his involvement in designing and facilitating a biennial Planning Commissioner Certificate Program targeted primarily at citizen planners in Maryland. The two-day course is administered by the University of Maryland and co-sponsored by the university and the Maryland Department of Planning, which provides the funding. The program focuses on the basics of land use and zoning, smart growth and related issues. Professor Cohen teaches three of the program's units.

Planning commissioners and zoning board of appeals members pay a registration fee of \$25, which is refunded if they attend both days of the class. Maryland Real Estate Licensees who take the course (for \$135) receive 6 hours towards recertification.

### **Smart Growth Leadership Program**

For the seventh and eighth time since 2000, the University of Maryland offered its Smart Growth Leadership Program to classes in spring 2004 and spring 2005. Together these two classes attracted more than 50 participants from Maryland, the District of Columbia and five other states representing local, state and federal governments, non-profit organizations, private sector developers, and middle and high school teachers.

The program explores: The core principles of Smart Growth and their implications for the development, revitalization and maintenance of vibrant communities; the fundamentals of planning and zoning and the legal context of land use; the forces and unintended consequences of government and private sector actions that contribute to sprawl; the various policy tensions and conflicts that exist among governmental programs and private actions affecting Smart Growth and how to identify common ground and areas for collaboration; and, the ways in which participants can take a more effective leadership role in seeing that Smart Growth principles are reflected in policy and action at many levels.

The program is facilitated by Dr. Judy Brown of the School of Public Policy, assisted by Professor James R. Cohen of the Department of

Urban Studies and Planning, and Smart Growth Center Associate Director John W. Frece.

### **Seminar on Property Taxation in China**

The Center, in conjunction with the Lincoln Institute of Land Policy, hosted a group of tax officials from the People's Republic of China for a week-long seminar on property taxation issues. The People's Republic of China is moving toward implementing some form of property taxation as the nation shifts from a managed economy to a market economy. This seminar, which began in Cambridge, Mass., and was concluded in College Park, Md., focused on both theoretical and practical issues related to property taxation. It also included a field trip to a Maryland property tax assessment office.

This training, organized by Center administrator Molly Martin, was done under the auspices of the Center's China Land Policy program headed by Chengri Ding and funded by the Lincoln Institute of Land Policy.

### **Training for Chinese**

Urban Studies and Planning Professor James R. Cohen gave five presentations to Chinese university faculty members and graduate students in Hangzhou, China in July 2004, as part of a training program on land development planning developed by the National Center for Smart Growth Research and Education.

### **Training for Trainers and Professional Training in China**

Through the China Land Policy Program, Dr. Chengri Ding has provided "training for trainers" at four events in China sponsored by the Lincoln Institute of Land Policy:

- Planning Analysis, (July 26-30, 2004, in Hangzhou, co-sponsored by Zhejiang University;
- Urban Economics in Beijing, July 12-17, 2004, co-sponsored by Beijing University;
- Urban Economics, Policy and Planning, July 18-29, 2005, co-sponsored by Beijing University;
- Property Taxation and Public Finance, Aug. 1-12, 2005, co-sponsored by Beijing University.

Dr. Ding also provided professional training on various topics at six additional events in China:

- Appraisal and Evaluation, May 24-28, 2004, Yangzhou, PRC, co-sponsored by the State Administration of Taxation;



- Smart Growth and Urbanization, March 27, 2004, Zhenzhou, PRC, co-sponsored by the Development and Reform Commission of Henan Province;
- Public Finance and Inter-government Relationship, March 28, 2004, Zhenzhou, PRC, co-sponsored by the Departments of Finance and Taxation of Henan Province;
- Planning in a Market Context, March 23, 2004, Beijing, PRC, co-sponsored by the Beijing Urban Planning Commission;
- Scenario Planning for a Transitional Economy, Aug. 2, 2005, Shenzhen, PRC, co-sponsored by Shenzhen Urban Planning Institute;
- Scenario Planning for a Transitional Economy, Aug., 3, 2005, Guangzhou, PRC, co-sponsored by Guangzhou Municipal Government

## **VII. CONFERENCES AND SYMPOSIA**

### **Center Hosts Debate on Sprawl**

Prior to the international planning conference in Annapolis, Md., in fall 2004, the National Center for Smart Growth Research and Education hosted a debate on the issues of smart growth and sprawl that featured Center research professor Reid Ewing and Harry Richardson from the University of Southern California. Ewing and Richardson had previously engaged in one of the most often cited written debates on the issue, with their opposing papers published in the *Journal of the American Planning Association*.

Joining Ewing and Richardson as part of the debate were two other faculty from the University of Maryland: Professor Robert Nelson of the School of Public Policy and James R. Cohen of the School of Architecture, Planning and Preservation.

### **“Incentives, Regulations and Plans: The Role of States and Nation-States in Smart Growth Planning”**

In Fall 2004, the Center hosted its first international planning conference in Annapolis, Md. Entitled, “Incentives, Regulations and Plans: The Role of States and Nation-States in Smart Growth Planning,” the conference revolved around the presentation of papers from a dozen European and North American researchers paired on six topics: containing sprawl; mixed use development; transit oriented development; affordable housing; healthy urban designs; and, marketing Smart Growth. Each researcher was teamed with a counterpart expert from abroad, both of whom were asked to prepare a paper on the same symposium topic.

The symposium attracted nine Europeans from six nations, two Canadians, and 34 from six states and the District of Columbia in the United States. The papers are being revised and edited and will be produced in a book to be published by Edward Elgar Publishing of the United Kingdom, probably in 2006.

### **Growth Management Leadership Alliance Conference**

In July 2004, the National Center for Smart Growth hosted a national meeting of the Growth Management Leadership Alliance on the College Park campus. The Growth Management Leadership Alliance is a network of leaders from state, provincial and regional organizations in the United States and Canada that carry out programs to directly shape and implement smart growth policies and actions.

Center Executive Director Gerrit Knaap welcomed the GMLA representatives to the University of Maryland campus and Associate Director John W. Frece gave a presentation on “Shaping the Smart Growth Message.”

## **VIII. MEDIA COVERAGE AND OUTREACH**

News media interest in the activities of the National Center for Smart Growth increased sharply during 2004 and 2005. Center faculty and staff fielded more than 60 inquiries from print and broadcast news reporters from more than a dozen states and Washington, D.C.

The Center was mentioned in articles in such national publications as the *New York Times*, the *Wall Street Journal*, the *Washington Post*, the *Baltimore Sun* and the *Philadelphia Inquirer*. Faculty members were interviewed by the CBS affiliate station in Los Angeles and by WAMU, the public radio station in Washington, D.C.

Specialty publications also honed in on the various research projects conducted by the Center. Organizations as different as the American Association of Retired People and the National Home Builders Association contacted Center staff and faculty to comment on articles. A “Faculty Profile” of Center Executive Director Gerrit Knaap appeared in the January 2004 edition of *Landlines*, the monthly publication of the Lincoln Institute of Land Policy.

Articles written by Center faculty and staff also appeared in the *Washington Post*, *Professional Builder* magazine, U.S. Water News, and the newsletter of the Association of African American Real Estate Professionals. The Center was even mentioned in an article in the *Guardian* newspaper in London.

During 2004 and 2005, Center staff also produced a number of informational publications and press releases, including:

- *National Center for Smart Growth Research and Education – 2003 Progress Report*, January 2004. This 53-page report is a compilation of all Center activities since its inception and is the Center’s first “annual report.”
- *National Center for Smart Growth Research and Education – Informational brochures about the center in both English and Chinese.*
- *Maryland Smart Growth Leadership Program – Informational brochures about the center offerings of the Smart Growth Leadership Program.*
- *China Land Policy and Urban Management Program – Informational brochures about the China program in both English and Chinese.*
- *Racial Segregation and Failing Urban Schools Seen as Engines of Sprawl*, press release, Feb. 9, 2004.

- *Portland is Winning the War on Sprawl*, press release, April 2004.
- *UNC, Maryland Researchers Study Impact of Neighborhood Development on Physical Activity, Obesity*, press release, August 25, 2004.
- *Urban Sprawl or Smart Growth? Which is the Problem? What is the Solution? A Smart Growth Debate*, press release, August 30, 2004.
- *Controlling Sprawl to Improve the Environment – Tom Daniels Speaks at the University of Maryland*, press release, Sept. 6, 2004.
- *Smart Growth Center/Public Health Team Awarded Grant to Study Linkage Between Adolescent Physical Activity and the Built Environment*, press release, December 17, 2004.
- *Timely Consolidation of Wastewater Treatment Plants Can Save Jurisdictions Capital Costs, Study Shows*, press release, Jan. 3, 2005.
- *Six Views on Smart Growth and New Urbanism*, press release about new collection of papers published in the *International Regional Science Review*, April 7, 2005
- *Universities as Protagonists for Smart Growth*, press release about *Partnerships for Smart Growth: University-Community Collaboration for Better Public Places*, a book edited by Gerrit-Jan Knaap and Wim Wiewel, provost and senior vice president for academic affairs at the University of Baltimore, containing a collection of essays from around the nation highlighting case studies in which universities and colleges have become smart growth practitioners, April 11, 2005.

In addition to the activities mentioned above, Education and Outreach Director Judy Brown represented the Center at a number of related events, both in Maryland and outside the state, including:

- Facilitated planning retreat of Maryland Cooperative Extension agents at Ocean City, summer 2003.
- Facilitated a five-day Smart Growth “boot camp” for Sea Grant extension agents nationwide for EPA’s Smart Growth office, fall 2003.

- Facilitated three-day Sea Grant Smart Growth policy planning meeting in Charleston that included the mayors of Honolulu and Charleston, top Sea Grant officials, and others from around the country;
- Facilitated half-day dialogue of community leaders from all sectors for Dorchester County, Maryland, spring 2004;
- Led a one-day leadership session for the Dearborn Business Innovation for Sustainability conference in Dearborn, Michigan, for 40 business executives and academics, including Amory Lovins, Peter Senge (MIT), Roger Saillant (CEO of Plug Power, a fuel cell firm) and a team of transportation researchers from the University of Michigan, fall 2004.
- Facilitated annual conference of Eastern Shore Land Conservancy on topic of growth of towns and villages, fall 2004.
- Made presentation to executives of the American Association of Services and Homes for the Aging conference, Nashville, Tenn., fall 2004.

## **IX. POLICY ADVISING, CONSULTATION AND PRESENTATIONS**

### **Antonio Bento**

#### **Conference Presentations**

Bento, Antonio. *An equilibrium Model for evaluating automobile pollution policies*. Presented at the University of Minnesota, Department of Agricultural and Resource Economics, November 2004, Minneapolis, MN.

Bento, Antonio. *The Welfare Effects of Corporate Fuel Efficiency Standards and other automobile policies*. Presented at Macalester College, November 2004, St. Paul, MN.

Bento, Antonio. *The Welfare Effects of Land Use Policies to Slum Dwellers: The case of Mumbai, India*. Presented at the University of California, Berkeley, Department of Agricultural and Resource Economics, April 2005, Berkeley, CA.

Bento, Antonio. *The Welfare Effects of Land Use Policies to Slum Dwellers: The case of Mumbai, India*. Presented at the University of California, Irvine, Department of Economics, April 2005, Irvine, CA.

Bento, Antonio. *The Welfare Effects of Land Use Policies to Slum Dwellers: The case of Mumbai, India*. Presented at Columbia University, The Earth Institute, March 2005, NY.

Bento, Antonio. *An Equilibrium Model for Evaluating Automobile Pollution Policies*. Presented at the University of Maryland, School of Public Policy, October 2004, College Park, MD.

Bento, Antonio. *An Equilibrium Model for Evaluating Automobile Pollution Policies*. Presented at Resources for the Future, October 2004.

Bento, Antonio. *An Equilibrium Model for Evaluating Automobile Pollution Policies*. Presented at the Joint Global Change Research Institute, March 2005.

Bento, Antonio. *The Welfare Effects of Land Use Policies to Slum Dwellers: The case of Mumbai, India*. Presented at The World Bank, Research Division.

## **Kelly J. Clifton**

### **Conference Presentations**

Clifton, Kelly J., Carolina Burnier, and Kandice Kreamer-Fults. *Women's Involvement In Pedestrian-Vehicular Crashes: The Influence Of Personal And Environmental Factors*. Presented at Research on Women's Issues in Transportation Conference, November 18-20, 2004, Chicago, IL.

Clifton, Kelly J. and Jennifer Dill. *Women's Travel Behavior and Land Use: Will New Urbanism Lead to More Women Walking?* Presented at Research on Women's Issues in Transportation Conference, November 18-20, 2004, Chicago, IL.

Clifton, Kelly J. and Kevin J. Krizek, Kevin J. *The Utility Of The Nhts For Understanding Bicycle And Pedestrian Travel*. Presented at National Household Travel Survey Conference: Data for Understanding Our Nation's Travel, November 1-2, 2004, Washington, DC.

Clifton, Kelly J. and Andréa D Livi. *The Development and Testing of an Audit for the Pedestrian Environment*. Presented at the Annual Meeting of the Association of Collegiate Schools of Planning, October 21-24 2004, Portland, OR.

Clifton, Kelly J., Andréa D Livi, Rodney Harrell. *Healthy Urban Design: Maryland's Smart Codes and the Pedestrian Environment*. Presented at Incentives, Regulations and Plans, Sept. 29-Oct. 1 2004, Annapolis, MD.

Livi, Andréa D. and Kelly J. Clifton. *Gender Differences in Walking Behavior, Attitudes About Walking and Perceptions of the Environment In Three Maryland Communities*. Presented at Research on Women's Issues in Transportation Conference, November 18-20, 2004, Chicago, IL.

Livi, Andréa D. and Kelly J. Clifton. *Issues and Methods in Capturing Pedestrian Behaviors, Attitudes And Perceptions: Experiences With A Community-Based Walkability Survey*. Presented at the Annual Meeting of the Transportation Research Board, January 2004, Washington DC.

Marco, Scuderi, and Kelly J. Clifton. *Bayesian Approaches to Learning from Data: Using NHTS Data for the Analysis of Land Use and Transportation*. Presented at National Household Travel Survey

Conference: Data for Understanding Our Nation's Travel, November 1-2, 2004, Washington, DC.

Targa, Felipe and Kelly J. Clifton. *The Built Environment And Trip Generation For Non-Motorized Travel*. Presented at National Household Travel Survey Conference: Data for Understanding Our Nation's Travel, November 1-2, 2004, Washington, DC.

Voorhees, Carolyn, Kelly J. Clifton, Andréa D Livi, K. Whitt, and D.R.Young. *Influence of Travel Patterns and Community Environment on Daily Walking In Urban High School Girls*. Robert Wood Johnson Foundation Active Living Research Annual Meeting, January 29-31, 2004, Del Mar, CA.

### **James R. Cohen**

#### **Conference Presentations**

Cohen, James R. *The Uneasy Relationship between Local Adequate Public Facilities Ordinances and Maryland Smart Growth Implementation*. Presented at the annual meeting of the Association of Collegiate Schools of Planning, October 21-24, 2004, Portland, OR.

### **Chengri Ding**

#### **Conference Presentations**

Brown, James H and Chengri Ding. *International Lessons on Urban and Land Management*. Presented at the International Urban Planning Forum. October 2004, Beijing, China.

Ding, Chengri, K. Bethke, and C. Wu. *Political Analysis of Land Acquisition: A Case Study in Zhejiang Province, China*. Presented at the Association of Collegiate of Schools of Planning Annual Meeting, Oct. 2004, Portland, OR.

Ding, Chengri. *Urban Spatial Structure and City Competitiveness*. Presented at the International Urban Planning Forum, a conference sponsored by the China Development Bank and the World Bank), October 2004, Beijing, China.

Ding, Chengri. *Urban Planning in the Market Context: Beijing Urban Planning Review*. Presented at the International Conference on Urban Development, November 2004, Wuhan, China.



Ding, Chengri. *International Property Taxation Development*. Co-sponsored by the Development Research Center of the State Council of the People's Republic of China, February 26-27, 2005, Beijing, China.

Ding, Chengri. *Smart Growth and Land Policy*. Co-sponsored by Zhejiang University, October 16-18, 2005, Hangzhou, China.

## **Reid Ewing**

### **Conference Presentations**

Ewing, Reid. *Balancing User Needs with New Street Guidelines, Comparing Forecasting Methods: Expert Land Use Panel Versus Simple Land Use Allocation Model, and Traffic Calming Revisited*. Presented at the annual meeting of the Transportation Research Board, Washington, January 10-12, 2005, Washington DC.

Ewing, Reid. *Beyond Roadway Levels of Service - Mobility, Accessibility and Sustainability Indicators and Successful and Unsuccessful Transit Oriented Developments in the U.S.* Presented at the International Workshop of the Tel-Aviv Metropolitan Area Mass Transit Master Plan, NTA, January 17-19, 2005, Tel-Aviv, Israel.

Ewing, Reid. *Communities and Families*. Presented at the Obesity and Built Environment: Improving Public Health Through Community Design Conference, May 25, 2004, National Institute of Environmental Health Sciences Washington D.C.

Ewing, Reid. *Community Planning for Physical Activity: Design Active Neighborhoods*. Presented at the Healthy Communities, Healthy People Conference, February 20, 2004, University of Virginia, Charlottesville, VA.

Ewing, Reid. *Elasticities of Walking with Respect to Density, Diversity, and Design and Building Smart Schools: Overcoming Obstacles to Walkable Schools*. Presented at the Annual Conference of the Association of Collegiate Schools of Planning, October 22-23 2004, Portland, OR

Ewing, Reid. *Health Effects of Sprawl*. Presented at Planning at the Crossroads: Making Great Communities Happen in the Heartland at the APA Regional Planning Conference, October 15, 2004, Indianapolis, IN.

- Ewing, Reid. *Heath Effects of Sprawl*. Presented at the Symposium Series, Hubert H. Humphrey Institute for Public Affairs, University of Minnesota, October 19, 2004, Minneapolis, MN.
- Ewing, Reid. *Healthy Cities and Smart Growth*. Presented at the California Healthy Cities and Communities Conference, April 22, 2004, Riverside, CA.
- Ewing, Reid. *Impacts of Urban Sprawl*. Presented at the Regional Leadership Series, March 31, 2005, Tampa FL.
- Ewing, Reid. *Identifying and Measuring Environmental Determinants of Physical Activity*. Presented at the Active Living Research Annual Conference. January 30, 2004, Del Mar, CA.
- Ewing, Reid. *Implications of Large Lot Zoning in the Countryside*. Presented to the Committee for a Sustainable Treasure Coast, March 7-8, 2005, Fort Pierce FL.
- Ewing, Reid. *Measuring Perceptual Qualities of the Urban Environment*. Presented at the Active Living Research Conference, Robert Wood Johnson Foundation. February 25-26, 2005, San Diego CA.
- Ewing, Reid. *Physical Activity and Density: What the Experts Say*. Presented at the Rail-Volution Conference, September 20, 2004, Los Angeles, CA.
- Ewing, Reid. *Public Health in the Public Eye and Overcoming Obstacles to Walkable Schools*. Presented at the National Planning Conference for the American Planning Association, April 24-28 2004, Washington, D.C.
- Ewing, Reid. *Relationship Between Urban Sprawl and Physical Activity, Obesity, and Morbidity*. Presented at the Colloquium on Cancer Prevention and Control, National Institutes of Health, March 10, 2004, Rockville, MD.
- Ewing, Reid. *Research on Transit, Walking, and Other Non-Auto Alternatives, Impacts of Sprawl and Auto Dependence and Effective Response Strategies, and Coordinated Land Use and Transportation Research*. Presented at the National Planning Conference for the American Planning Association, March 21-23, 2005, Washington DC.
- Ewing, Reid. *School Location and Student Travel: Analysis of Factors Affecting Mode Choice*. Presented at the Transportation Research Board's Annual Conference. January 14, 2004, Washington D.C.

Ewing, Reid. *Solutions: Use of Transit Oriented and Other Designs to Promote Biking and Walking*. Presented at the Annual Conference of the American Public Health Association. November 8, 2004.

Ewing, Reid. *Sprawl and Growth Management*. Presented at the Brawl Over Sprawl Conference, January 26, 2004, Property Council of Australia, Brisbane, Australia.

Ewing, Reid. *Traffic Calming Revisited*. Presented at the Streets Design Forum, February 12, 2005, Longmont CO.

Ewing, Reid. *What Can Divided Highways Teach Us?* Presented at the Maryland Smart Growth Leadership Program. May 3, 2004, Baltimore, MD.

### **John W. Frece**

#### **Conference Presentations**

Frece, John. *Developing the Smart Growth Movement Work Plan*. Annual conference of the Partners for Smart Growth. January 23, 2004, Portland OR.

Frece, John. Smart Growth presentation for the School of Planning, Virginia Tech. March 2004, Blacksburg VA.

Frece, John. *Newswriting and Reporting*, School of Journalism, March and October 2004, College Park MD.

Frece, John. Smart Growth lecture at the Institute for Global Chinese Affairs. March 2004, Guangzhou, China.

Frece, John. Smart Growth presentation for the Michigan Suburbs Alliance. April 2004, Washington DC.

Frece, John. Smart Growth presentation for a delegation from the School of Geography, University of Vienna (Austria). April 2004, College Park MD.

Frece, John. *Communicating the Smart Growth Message*. Presented at the Growth Management Leadership Alliance Conference. July 2004, College Park MD.

Frece, John. Smart Growth lecture for a delegation from the Japan Intercultural Academy of Municipalities. July 2004, College Park MD.

Frece, John. Smart Growth lecture for a class from Shangdong Province, China at the Institute for Global Chinese Affairs, September 2004.

Frece, John. Smart Growth lecture for a class from Henan Province, China at the Institute for Global Chinese Affairs, October 2004.

Frece, John. Smart Growth lecture for a class from Jiangsu Province, China at the Institute for Global Chinese Affairs, October 2004.

Frece, John. *Journalism and Government Policy*. Presented at the School of Public Affairs, October 2004, College Park MD.

Frece, John. Smart Growth presentation for the Maryland Municipal League winter conference. October 2004, Cumberland MD.

Frece, John. *Smart Growth 101*. Presented at the 4<sup>th</sup> Annual New Partners for Smart Growth Conference. January 2005, Miami FL.

Frece, John. Presentation at Reality Check: Envisioning the Region's Growth, an event sponsored by ULI Washington, the Smart Growth Alliance, Fannie Mae and the Fannie Mae Foundation. February 2, 2005, Washington DC.

Frece, John. *Revitalizing Small Town America in an Era of Big Box Store Development*. Presentation at a Vermont Law School symposium. March 2005, South Royalton VT.

Frece, John. *Smart Growth Case Studies and Shaping the Smart Growth Message* for the Smart Growth Leadership Program. April 18-24, 2005, Baltimore MD.

Frece, John. *Smart Growth 101*, presentation at the National Association of City and County Health Officials and the Association of State and Territorial Health Officials, July 13, 2005, Boston, MA.

### **Gerrit-Jan Knaap**

#### **Conference Presentations**

Knaap, Gerrit-Jan. *Comments on Social and Environmental Impacts of Redevelopment*. Presented at Resources for the Future, January 2004, Baltimore, MD.

- Knaap, Gerrit-Jan. *The Development Capacity Task Force*. Presented at the Annual Growth Conference of the Maryland Homebuilders, December 2004, Baltimore, Maryland.
- Knaap, Gerrit-Jan. *Economics of New Urbanism*. Presented at the Department of Urban Planning, Florida State University, April 2004, Florida.
- Knaap, Gerrit-Jan. *The Fruits of Growth Management in the Sunshine State*. Presented at the Devoe Moore Center, Florida State University, January 2005, Florida.
- Knaap, Gerrit-Jan. *Incentives as a Growth Management Tool*. Presented at a PhD Colloquium in Urban Planning and Design, University of Washington, March 2005, Seattle, Washington.
- Knaap, Gerrit-Jan. *Measuring Urban Form*. Presented to the Rand Corporation. March 2004.
- Knaap, Gerrit-Jan. *Property Tax Finance*. Presented at the Lincoln Institute of Land Policy. September 2004.
- Knaap, Gerrit-Jan. *A Requiem for Smart Growth?* Presented at the School of Law, Washington University-St. Louis, December 2004, St. Louis, Missouri.
- Knaap, Gerrit-Jan. *Seeing the Elephant; and Neighborhood Classification*. Presented to the Association of Collegiate Schools of Planning, October 2004, Portland, OR.
- Knaap, Gerrit-Jan. *Smart Growth and Housing Affordability*. Presented to the American Planning Association, April 2004, Washington: DC.
- Knaap, Gerrit-Jan. *Is Smart Growth in Maryland Working?* Seminar in Law and Public Policy, Wagner School of Public Policy and School of Law, New York University, March 2005, New York.
- Knaap, Gerrit-Jan. *Smart Growth in the United States*. Presented to the Ministry of Land Resources, March 2004, China.
- Knaap, Gerrit-Jan. *Technology and Urban Development*. Presented at Johns Hopkins University: Downtown Center, April 2004, Washington, DC.

Knaap, Gerrit-Jan. *TOD Charrette*. Conducted at the Municipality of Stockholm, June 2004, Stockholm, Sweden.

Knaap, Gerrit-Jan. *The Transportation-Land Use Policy Connection*. Presented at the Center for Transportation Research, School of Engineering, University of Minnesota, November 2004, Minneapolis, Minnesota.

Knaap, Gerrit-Jan. *Urban Economics*. Presented at the Beijing Department of Planning, June 2004, China.

### **Glenn Moglen**

#### **Conference Presentations**

Moglen, G.E. and J. Rao. "Imperviousness: You Know It When You See It", Presented at the American Water Resources Association GIS and Water Resources Specialty Conference, May 17-19, 2004, Nashville, Tenn.

Moglen, G.E. "Tracking Urbanization and Modeling Hydrologic Change in the Mid-Atlantic." Presented to the Department of Geography, University of Maryland, College Park, Maryland, April 28, 2005.

## **X. FACULTY AND STAFF BIOGRAPHIES**

**GERRIT-JAN KNAAP**, the Center's executive director, is an economist and professor of Urban Studies and Planning. He is author of more than 40 articles and five books on state and local land use planning and economics. His research interests include the economics and politics of land use planning, the efficacy of economic development instruments, and impacts of environmental policy. He is co-author, editor, or co-editor of five books: *Land Market Monitoring for Smart Urban Growth*; *Environmental Program Evaluation*; *Spatial Development in Indonesia*; *The Regulated Landscape: Lessons on State Land Use Planning from Oregon*; and, *Partnerships for Smart Growth: University-Community Collaboration for Better Public Places*. He earned a B.S. from Willamette University, his M.S. and Ph.D. from the University of Oregon, and received post-doctoral training at the University of Wisconsin-Madison, all in economics.

**RACHELLE BEASLEY** joined the Center as Coordinator in August 2005. She has been with the University of Maryland College Park for 13 years, working with departments such as Engineering, Health & Human Performance and the Graduate School. She is a current member of the National Council of University Research Administrators. She is in the process of completing her Bachelors Degree in Business Management with University of Maryland – University College.

**ANTONIO BENTO** is an assistant research professor at the Center and holds an assistant professorship in the School of Public Policy. His fields of interest include environmental economics and policy, urban economics and public economics. Since joining the Center in 2004, Bento has had three papers accepted for publication in prestigious journals, including, "The Efficiency and Distributional Impacts of Anti-Sprawl Policies" (with Sofia Franco), forthcoming in the *Journal of Urban Economics*. He also is conducting research on the impacts of urban growth boundaries on housing prices in California and the impacts of urban sprawl on community participation and civic engagement. Bento is an environmental economist who earned his Ph.D. at the University of Maryland in Agricultural and Resource Economics. He also holds a degree of Licenciatura in Economics from the Universidade Nova de Lisboa in Portugal.

**JUDY BROWN** directs the Center's education and training programs. She teaches leadership at the graduate School of Public Policy and also serves as senior fellow at the Center for Public Policy and Private

Enterprise, and at the James MacGregor Burns Academy of Leadership. She helped create and has taught in the Center's Smart Growth Leadership Programs. She holds a B.A. degree in humanities and M.A. and Ph.D. degrees in comparative literature, all from Michigan State University.

**KELLY J. CLIFTON** is an assistant research professor at the Center and holds assistant professorships in both Civil and Environmental Engineering and Urban Studies and Planning. Her research focuses on the influence of the built environment on travel choices, which include the following three areas: the relationship between transportation and land use, planning for non-motorized transportation, and the mobility needs of low-income populations. She received a B.S. degree in mechanical engineering from West Virginia University, a M.S. degree in planning from the University of Arizona, and a Ph.D. in community and regional planning from the University of Texas at Austin. She is a member of the Transportation Research Board Committee on Traveler Behavior and Values and chairs the Qualitative Methods Subcommittee.

**JAMES R. COHEN** is a research associate at the Center, and director of graduate studies in the Urban Studies and Planning Program. He teaches planning history and theory, advanced planning theory, growth management, the planning process, and a community planning field studio. His research involves land use planning, growth management and planning history and theory. He received his B.A. degree in history at the University of Michigan, a Master of Regional Planning and a Ph.D. in City and Regional Planning, both from Cornell University.

**CHENGRI DING** is associate professor of Urban Studies and Planning and director of the Chinese Land Policy Program, co-sponsored by the University of Maryland and the Lincoln Institute of Land Policy. His research interests include urban economics, growth management, housing and land studies, and the application of quantitative methods and GIS to issues in planning and public policy. He holds a B.S. degree from Beijing Normal University, an M.S. degree from the Chinese Academy of Sciences, and Ph.D. from the University of Illinois at Urbana-Champaign in regional planning.

**REID EWING** is a research professor and associate professor of Urban Studies and Planning. He has written books for the major planning and development organizations: *Developing Successful New Communities* for the Urban Land Institute; *Best Development Practices* and *Transportation*



*and Land Use Innovations* for the American Planning Association; and *Traffic Calming State-of-the-Practice* for the Institute of Transportation Engineers. The two APA books have made him APA's top selling author for many years. His study of sprawl and obesity may have received more national media coverage than any previous planning study. Ewing holds master degrees in engineering and city planning from Harvard University and a Ph.D. in transportation systems and urban planning from the Massachusetts Institute of Technology.

**JOHN W. FRECE** is the Center's associate director and an adjunct professor in Urban Studies and Planning. His responsibilities include public outreach and response to media inquiries related to smart growth generally and Maryland's Smart Growth initiative specifically. He coordinates publications, web page content, writes and edits articles, assists and teaches in the Center's Smart Growth Leadership Program, and serves as a deputy to the Executive Director. A longtime newspaper reporter, Frece previously worked on the staff of the governor of Maryland, where he was the chief spokesman for Maryland's Smart Growth initiative. He holds a B.A. in philosophy from the College of William and Mary in Virginia.

**MOLLY H. MARTIN** was the Center's Coordinator and Program Management Specialist until leaving for another position in August 2005. Her interests include community involvement and education, environmental justice, land tenure, and especially disenfranchised communities. She has worked for the Center for Neighborhood Technology in Chicago, the Surface Transportation Policy Project, the Department of Energy's Center for Risk Excellence, and the Environmental Assessment Division at Argonne National Laboratory. She is currently writing her Master's thesis on American Indians and Smart Growth through the Institute of Environmental Studies at the University of Wisconsin-Madison. While at UW-Madison, she was involved with the Land Tenure Center and the Native American Journalists Association. She holds a B.A. in environmental studies and anthropology from the University of Chicago.

**GLENN MOGLEN** is an associate research scientist at the Center and an associate professor in the Department of Civil and Environmental Engineering. His research focuses on issues of urbanization and the impacts of land use change on the hydrologic environment. His work frequently employs the use of Geographic Information Systems (GIS) and its use in modeling applications. Recent efforts of Moglen have sought to apply quantitative measures to land development decisions in efforts to

minimize impacts to the hydrologic and ecological environments. His work has been published in many journals including *Water Resources Research*, the *Journal of Hydrologic Engineering (ASCE)*, the *Journal of Hydrology*, the *Journal of the American Water Resources Association*, *Geomorphology*, and *Ecosystems*. He is also an author in the forthcoming, *Encyclopedia of Hydrology* on the topic of digital elevation model analysis in GIS. Moglen has recently completed a sabbatical at the U.S. Geological Survey, Office of Surface Water, where he focused on developing new methods for estimating flood frequency in urbanizing landscapes. He holds a B.S. from the University of Maryland, an M.S. from Colorado State University, and a Ph.D. from the Massachusetts Institute of Technology.

## **XI. AFFILIATE FACULTY**

More than two dozen University of Maryland faculty and faculty from other academic institutions are affiliates of the Center. Home departments include public policy, agricultural economics, American studies, geography, landscape architecture, the academy of leadership, historic preservation, engineering, architecture and urban studies. These affiliate faculty often work with faculty and staff at the Center or are engaged in research consistent with the mission of the Center. Examples of their work is below, followed by a full listing of the Center's affiliate faculty.

### **Marie Howland**

Urban Studies and Planning Professor Marie Howland continued her research on issues related to contaminated brownfields and their potential for redevelopment. Her paper, "Central City Decline: Is Contamination Responsible?" was published in *Economic Development Quarterly*. A related paper entitled, "Is Contamination the Major Barrier to Inner-City Industrial Revitalization? Recycling the City: The Use and Reuse of Urban Land," was published by the Lincoln Institute for Land Policy. Howland has also worked with former Center Research Associate Jungyul Sohn on a paper for the Lincoln Institute entitled, "Will Maryland's Priority Funding Areas Initiative Contain Urban Sprawl?" A separate paper, "Immigrants and Sprawl: Washington, D.C.," is currently under review.

### **Matthias Ruth**

With funding, in part, from the Center, Public Policy Professor Matthias Ruth has compiled and now submitted two books for publication. The first is entitled, *Smart Growth, Regional Development and Adaptation to Climate Change*. The second, edited by K. Donaghy and P.H. Kirshen, is entitled, *Climate Change and Variability: Local Impacts and Responses*. Both are to be published by Edward Elgar Publishers, Cheltenham, England, and are likely to appear in winter 2005/6.

### **Wim Wiewel**

Wim Wiewel, now provost of the University of Baltimore, completed editing *Partnerships for Smart Growth* with Gerrit Knaap. The book presents case studies of how universities help promote Smart Growth and is the result of a joint project between the U.S. Environmental Protection Agency, the Association of Collegiate Schools of Planning, and the Lincoln Institute of Land Policy.

### **Robert H. Nelson**

Robert H. Nelson, a professor of environmental policy in the School of Public Policy, published in July 2005 a new book, *Private Neighborhoods*

*and the Transformation of Local Government*. The book, which was featured in a nationally syndicated newspaper article by columnist Neal Peirce, documents the increase in homeowner association-governed communities from a base of 10,000 in 1970 to 260,000 in 2004. Nelson writes that approximately 52 million Americans live in communities governed by private neighborhood associations, describing it as “a large-scale privatization of local government.”

### **Shenglin Chang**

Shenglin Chang has been involved in a number of projects, papers and conference presentations related to the experience of immigrants to America and suburban development patterns. In 2004, he completed a report entitled, “Can City Lifestyle be a Catalyst for Smart Suburban Change? A Comparative Investigation into How Asian and Latino Immigrants’ Prior Urban Experiences, and American’s Prior Suburban Experiences Can Inform the Future Planning and Growth of Maryland Suburbs.” He also has an article forthcoming in the *Journal of Architectural and Planning Research* entitled, “Urban Grown, Suburban Bound: Asian and Latino Immigrant Home Identities in Suburban Washington DC,” in a theme issue on “Residential Experience of Immigrants in North America.”

### **José Faria**

Jose Faria completed his doctoral dissertation, entitled “Multi-objective Optimization Models and Solution Methods for Planning Land Development Using Minimum Spanning Trees, Lagrangian Relaxation and Decomposition Techniques.” This dissertation discusses the application of mathematical techniques to solve large scale land development problems. It also discusses the application of the Minimum Spanning Tree as a measurement of compactness that could be used gauge the effectiveness of policies designed to prevent the proliferation of sprawl.

## **Full List of Center Affiliates – 2004-2005**

**Anna Alberini**, *Assistant Professor, Agricultural and Resource Economics*

**Uri Avin**, *FAICP, Practice Leader, PB PlaceMaking, Parsons Brickerhoff, Baltimore.*

**Howell S. Baum**, *Professor, Urban Studies and Planning Program*

**Matthew J. Bell**, *Associate Professor*  
School of Architecture, Planning and Preservation

**Ralph Bennett**, *Professor*, School of Architecture, Planning and  
Preservation

**Sidney N. Brower**, *Professor*, Urban Studies and Planning Program

**Marita B. Brown**, *Senior Resident Scholar*, School of Public Policy

**Shenglin Chang**, *Assistant Professor*, Natural Resource Science and  
Landscape Architecture

**Malise Dick**, *Adjunct Professor*, Business

**José Faria**, recent graduate, Master of Science in Systems Engineering.

**Charles G. Field**, *Senior Research Fellow*, School of Public Policy

**Christopher H. Foreman**, *Professor and Director of Social Policy Program*,  
School of Public Policy

**Lawrence Frank**, *Associate Professor*, City and Regional Planning  
Program, Georgia Institute of Technology

**Steven A. Gabriel**, *Assistant Professor*, Civil and Environmental  
Engineering

**William Hanna**, *Professor*, Urban Studies and Planning Program

**Marie Howland**, *Director and Professor*, Urban Studies and Planning  
Program

**Steven Hurtt**, *Professor*, School of Architecture, Planning and  
Preservation

**Mary Konsoulis**, *Lecturer*, Historic Preservation Program

**Roger K. Lewis**, *Professor*, School of Architecture, Planning and  
Preservation

**Erik Lichtenberg**, *Professor*, Agriculture and Resource Economics

**Donald W. Linebaugh**, *Associate Professor and Director*, Historic

Preservation Program

**Loretta M. Lynch**, *Associate Professor, Agricultural and Resource Economics*

**David N. Myers**, *Assistant Professor, Natural Resource Sciences & Landscape Architecture*

**Robert H. Nelson**, *Professor, School of Public Policy*

**Matthias Ruth**, *Roy F. Weston Chair in Natural Economics, Director, Environmental Policy Program and Co-Director, Engineering and Public Policy, School of Public Policy*

**Peter Shapiro**, *Senior Fellow, the James MacGregor Burns Academy of Leadership, School of Public Policy*

**Qing Shen**, *Associate Professor, Urban Studies and Planning*

**Mary Corbin Sies**, *Associate Professor, American Studies*

**Jungyul Sohn**, *Assistant Professor of Geography, University of Memphis (Tenn.)*

**Yan Song**, *Assistant Professor, Department of City and Regional Planning, University of North Carolina at Chapel Hill*

**Carolyn C. Voorhees**, *Research Assistant Professor, Department of Public and Community Health*

**Wim Wiewel**, *Provost and Senior Vice President for Academic Affairs, University of Baltimore*