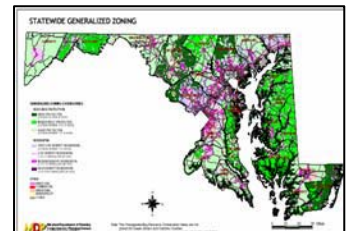
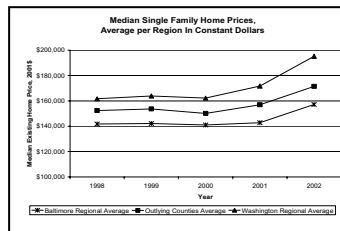




2003 PROGRESS REPORT



THE UNIVERSITY OF MARYLAND
SCHOOL OF ARCHITECTURE, PLANNING AND PRESERVATION *
SCHOOL OF AGRICULTURE AND NATURAL RESOURCES *
SCHOOL OF ENGINEERING * SCHOOL OF PUBLIC AFFAIRS

*The National Center for
Smart Growth
Research and Education*

2003 PROGRESS REPORT



UNIVERSITY OF
MARYLAND

Suite 1112 Preinkert Field House
College Park, Maryland 20742
301.405.6788 tel.
301.314.5639 fax
www.smartgrowth.umd.edu

A Message from the Executive Director...

The National Center for Smart Growth Research and Education was created just over three years ago to become a national leader in research and education on the land use issues raised by the term “Smart Growth.” I am proud to say the Center is making substantial progress toward that goal.

To date, the Center has received nearly \$2 million in grants and contracts. Center staff have published (or have accepted for publication) 24 papers in refereed journals, four books, and many working papers and reports. Research produced by Center staff has been reported in many of the most prominent newspapers in Maryland, the United States and around the world.

What’s more, the Center is increasingly becoming known internationally, nationally and in Maryland as an objective source of information about Smart Growth and land use issues – demonstrating that a multi-school interdisciplinary research and education center can thrive in an increasingly competitive and fragmented academic environment.

The Maryland Agenda

Since its inception, one of the Center’s most important roles is to provide objective research and educational support for the state of Maryland’s Smart Growth efforts. Though much of the work is still in progress, the Center is poised to make important contributions to land use policy-making in Maryland.

Research by Center faculty -- and work by affiliate faculty funded by Center grants -- has produced fresh new papers on brownfield redevelopment, job creation tax credits, Priority Funding Areas, housing development capacity, and changes in Montgomery County development patterns. Maryland work is underway on the effects of Smart Growth on development patterns, on models of land use change and pedestrian traffic, and on adequate public facility ordinances.

Work is also about to begin on a book that describes and critically evaluates the performance of the Smart Growth program in Maryland. These projects — and a recently launched initiative to develop and publish a set of Maryland Smart Growth indicators -- have significant potential to shape public policy in the near future.

The Center has begun to build strong relationships with the new administration in Annapolis. This reflects, in part, the ongoing impact of the Smart Growth Leadership Program and its network of alumni. It also stems from joint research projects with the Maryland Department of Planning and the homebuilder associations in the Baltimore and Washington regions.

The Smart Growth Leadership Program, an offering that predates the creation of the Center, has been consistently well received. It has drawn its faculty from all four of the Center's participating colleges, nationally known outside experts, and an impressive and diverse group of Smart Growth leaders and practitioners that has included Realtors, developers, lawyers, and prominent county and state officials. Its network of alumni stays in touch with the Center, and participation at the first alumni event in fall 2003 was high.

The center is now exploring alternative formats for outreach and education that build on the capacities of the Leadership Program faculty. Examples include Smart Growth Study Tours in Maryland, a proposal to establish a national Smart Growth curriculum institute for high school educators, and projects in which the Center partners with other states or other jurisdictions to develop Smart Growth related programs.

In 2003, I was gratified to be appointed by the Governor to a Development Capacity Task Force that will work with five counties and five municipalities to develop protocol for inventorying land available for future development. Research Professor Reid Ewing and I also were asked to serve on a panel to review the land use implications of the Intercounty Connector highway connecting I-270 with I-95. And John Frece, the Center's communications director and former head of the state's Office of Smart Growth, was asked to serve on an Economic Development Task Force for the city of College Park.

The National Agenda

It is difficult to imagine that any Center focused on land use and the broad array of issues raised by the term "Smart Growth" could have gained more national exposure than the National Center for Smart Growth this last year.

The publicity surrounding Reid Ewing's work on the relationship between health and urban development patterns not only exposed the Center before a national audience but established the Center as an international leader on research in this emerging topic. As Dr. Ewing continues to present his work around the nation, and as papers are published on projects led by Center affiliates Carolyn Voorhees and Kelly Clifton, the Center's reputation in this field is certain to grow.

The work I did in collaboration with Yan Song of the University of North Carolina (one of the original National Center for Smart Growth researchers) on the price impacts of New Urbanism also received significant national exposure and served to identify the Center as a national leader of quantitative approaches to evaluating urban form. This reputation is likely to grow as forthcoming papers on related topics are published in national academic journals.

Two projects yet in their early stages are also likely to strengthen the Center's reputation. Research on exclusionary zoning recently launched with the American Planning Association and funded by the

U.S. Department of Housing and Urban Development, the Fannie Mae Foundation and the Lincoln Institute of Land Policy will likely receive considerable national attention. And, the Center's ongoing national demonstration project on land market monitoring will expose the Center to several regional markets around the nation.

The National Center has hosted major research conferences in each of the past two years and is currently planning an international conference in Maryland in fall 2004 that will focus on regional land use issues. These conferences represent important venues for developing relationships with practitioners and scholars, disseminating and germinating research, and producing material for scholarly publications.

The International Agenda

With the support of the Lincoln Institute of Land Policy, the Center has built a foundation for significant research, education, and training in the international arena. Under the grant that brought Chengri Ding to the University of Maryland from Texas A&M, the Center is playing a critical role in helping the Lincoln Institute launch a major research and training initiative in China. In addition, the Center's emerging relationship with the Institute for Global Chinese Affairs and the World Bank, codified in a recent Memorandum of Understanding, provides new opportunities for developing urban management programs for Chinese scholars and government officials.

New opportunities also are being developed with Habiforum, a Brookings-like institute in the Netherlands. Habiforum is interested in developing long-term collaborative relationship with institutions in the United States on international approaches to Smart Growth. International opportunities for research, education and training on urban development issues are virtually unlimited; and there is now sound foundation for capturing them as they arise.

Future Opportunities

With the expected addition of a new researcher in fall 2004, the Center will have in place a core staff of researchers with expertise in a diversified range of Smart Growth and land use issues. Moreover, the Center staff continues to offer the Smart Growth Leadership Program, to host major research conferences, to serve on governmental advisory panels, and to accept speaking engagements around Maryland and throughout the country.

It is gratifying to be able to report that as we enter our fourth year, the National Center for Smart Growth Research and Education is clearly poised to be recognized as a respected and influential voice on Smart Growth and land use policies, not only in Maryland, but around the world.

Gerrit Knaap
January 2004

TABLE OF CONTENTS

I.	Introduction and History	1
II.	Mission Statement	3
III.	2003 Highlights	4
IV.	Projects	6
V.	Papers and Publications	14
VI.	Small Grants Program	22
VII.	Education and Training	27
VIII.	Educational Outreach and Media Coverage	30
IX.	Conferences and Symposia	34
X.	Policy Advising, Consultation and Presentations	37
XI.	Facilities and Resources	43
XII.	Faculty and Staff	44
XIII.	Center Affiliates	50
	Appendix 1 – Grants and Contracts	52

I. INTRODUCTION AND HISTORY

The National Center for Smart Growth Research and Education (hereafter, 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; Architecture, Planning and Preservation; Engineering; and Public Affairs. 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.

While much was being done in Maryland, however, many other states and, indeed, a number of other nations have been trying increasingly to address the multiple issues raised by the pressures of new development. Despite those efforts, little had been done to analyze the laws, regulations, policies and other strategies being employed to direct or channel new development in ways that support existing communities, encourage quality design and protect natural resources. Moreover, public officials at all levels of government – municipal, county, state and federal – find that they are increasingly being asked to implement “smarter growth” patterns, but are often ill-equipped to grasp the larger, interconnected issues related to attempts to manage growth.

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 21st 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 strategies.

In November 1999, as part of an internal, competitive process, the University of Maryland College Park earmarked \$350,000 from an enhancement fund for the purpose of establishing a Smart Growth Center at the campus. Maryland Governor Parris N. Glendening responded in early 2000 by adding a \$200,000 supplemental appropriation for the Center to his FY 2001 state budget. The measure was approved by the Maryland General Assembly in April 2000, thus launching the National Center for Smart Growth Research and Education at the University of Maryland, effective July 1, 2000.

The Center’s initial staff was headed by Tom Downs, the former chief of AMTRAK, the National Association of Home Builders and the New Jersey Department of Transportation, and Gerrit-Jan Knaap, an

economist, author and land use researcher recruited from the University of Illinois at Champaign. Katie Petrone joined the staff as grants administrator and office manager and Yan Song and Jungyul Sohn as post-doctoral research associates. The Center's temporary offices were located in the basement of the Caroline Hall dormitory.

The Center's goals were 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. 2003 HIGHLIGHTS

Although 2003 marked the third year since the Center was established, it was without question a break-through year. Research activities and funding expanded dramatically. The Center's core staff more than doubled in size, from three to seven. And the scope of the Center's work ranged from Smart Growth issues in Maryland to an array of national and international land use and urban development issues

Gerrit Knaap assumed duties as Executive Director, replacing Tom Downs, who now heads the Eno Transportation Foundation. Working with post-doctoral research associates Jungyul Sohn and Yan Song, Knaap and his colleagues launched Phase I of a national demonstration project in land market monitoring and published several papers incorporating quantitative measurements of urban form. A report was released on housing markets and development trends in Maryland's Baltimore-Washington corridor and a new national project was launched to identify the effects of zoning on housing affordability. Both the published papers and report on housing markets and development trends drew local and national media attention.

Two new researchers, Chengri Ding and Reid Ewing, joined the staff in the fall from Texas A&M University and Rutgers University, respectively. Dr. Ding started the Center's China Land Program, which at year's end was rapidly expanding with training opportunities for Chinese officials both in China and in the U.S. As a result of its rapid rise to prominence, the Center's China program has received support from the highest level of the Chinese Government as well as from the World Bank.

Dr. Ewing, meanwhile, brought to Maryland new research linking sprawl development with obesity and related public health problems. It is not overstatement to say this report quickly became one of the most widely publicized planning studies in history. Dr. Ewing also published a report of pedestrian accessibility to secondary schools, which also attracted national media exposure.

To oversee education and outreach efforts, longtime University of Maryland faculty and staff member Judy Sorum Brown joined the Center staff after having been part of the faculty for the Center's Smart Growth Leadership Program since its inception. Under her direction, the Center again offered the Leadership program to state and local officials, where it not only received uniformly high evaluations from participants but also served to establish important relationships with the new administration in Annapolis.

John W. Frece, a veteran newspaper reporter, former gubernatorial communications director, and spokesman for Maryland's Smart Growth program, joined the Center as communications director. In the short time since joining the Center, Mr. Frece has revamped the Center

website, produced new brochures, drafted the Progress Report, edited several documents and reports, and provided the Center with expanded media exposure.

In 2003, the Center staff also consolidated offices in newly refurbished quarters in Preinkert Field House, immediately adjacent to the School of Architecture, Planning and Preservation and the School of Public Affairs on the College Park campus.

IV. PROJECTS

In just three years, the Center has been able to bring in more than \$1.8 million in research grants and contracts. With the addition of talented new staff, the Center expects to expand the range and impact of its work.

Work at the Center is organized in four general areas:

- Land use and the environment;
- Transportation and public health;
- Housing and community development; and,
- International urban development.

LAND USE AND THE ENVIRONMENT

Under the leadership of Gerrit Knaap, in collaboration with Research Associates Yan Song and Jungul Sohn, many of the Center's initial projects focused on land use and environmental issues. Much of the work involves the use of advanced geographic information systems, the measurement of urban form and development capacity, the use of such data for policy analysis and land use decision making.

National Land Market Monitoring Demonstration Project

As an extension of work begun by Dr. Knaap at the University of Illinois, the Center is about to begin the second phase of a national demonstration project in land market monitoring. In Phase I, funded by the U.S. Department of Transportation, the U.S. Department of Housing and Urban Development and the Lincoln Institute of Land Policy, Dr. Knaap and Dr. Zorica Budic (University of Illinois Urbana-Champaign) conducted a national assessment of the capacity of metropolitan planning organizations to use GIS for land use and transportation planning. The final report was recently submitted to the sponsoring agencies. Also in Phase I, the Center organized workshops in Orlando, Baltimore, College Park, and San Diego in part to identify candidate sites for Phase II of the project.

A proposal for Phase II is now under consideration by HUD, the Lincoln Institute, the National Association of Home Builders, the National Association of Realtors, the Fannie Mae Foundation, and the National Center for Housing and the Environment. Under Phase II, the Center will provide matching funds to four or five regional organizations (e.g., metropolitan planning agencies, councils of government, or county governments) to develop and implement land market monitoring programs.

Training on how to develop, implement, and utilize a monitoring system will be provided by the Center and the Lincoln Institute of Land Policy. The Center will also serve as a technical assistance center,

collecting data from the participating metropolitan areas, and serving the data via the world wide web.

Maryland Smart Growth Report Card

In a project closely related to the national demonstration project, the Center is working with the Maryland Department of Planning to develop indicators that will provide insights on the performance of the state's Smart Growth initiative. Measures of urban development capacity will be included among the indicators, which will allow Maryland jurisdictions to assess their progress in following their own land use plans and their relative efficiency in managing growth. Funded by the Lincoln Institute of Land Policy, the project represents an independent, objective review of the progress made as a result of Maryland's landmark 1997 Smart Growth program. In conjunction with this project, Dr Knaap has been appointed by Governor Ehrlich to serve on a task force charged with designing methods of development capacity analysis. Chaired by Maryland Planning Secretary Audrey E. Scott, the task force is to issue its first report in June 2004.

Measuring Urban Form

As a continuation of work they began at the University of Illinois, Gerrit Knaap and Yan Song are developing quantitative measures of urban form and using these measures to conduct policy analysis. Early work, using data from Portland, Oregon, has produced publications in the *Journal of the American Planning Association*, the *Journal of Urban Economics*, the *International Regional Science Review*, and the *Journal of the Transportation Research Board*.

In 2001, the Center received funding from the Lincoln Institute and the Brookings Institution to conduct a detailed analysis of urban development patterns for five metropolitan areas. These include Portland, Oregon; Orlando, Florida; Phoenix, Arizona; Montgomery County, Maryland; and Minneapolis-St. Paul, Minnesota. Focusing on the area urbanized over the last two decades in each metropolitan area, the Center will calculate several measures of urban form and conduct inter- and intrametropolitan analyses of differences and trends in urban form. Preliminary results were recently presented at the meetings of the Regional Science Association in Philadelphia.

Web-based Technology in Urban Planning

Dr. Knaap, working with Lewis Hopkins at the University of Illinois, is investigating ways in which information technologies are changing how local governments plan and manage growth. The purpose of the research is to advance the state of the art in the use of web-based technology for using, managing, and making plans.

Work at the Center includes a web-based survey of local government websites that focus on planning. The results of the survey

were recently published by the American Planning Association as a Planning Advisory Service Memo and used in two workshops organized by Dr. Knaap and Dr. Hopkins at the Lincoln Institute of Land Policy, which funded the work.

Smart Growth and the Academy

Dr. Knaap is working with Wim Wievel, former president of the Association of Collegiate Schools of Planning, to collect and develop case studies on how universities help facilitate Smart Growth. The project will produce an edited, published volume, tentatively titled *Lessons in Smart Growth: University Case Studies and Best Practices*, to be published by the Sharpe Publishers. The project is funded by the U.S. Environmental Protection Agency and the Lincoln Institute of Land Policy.

TRANSPORTATION AND PUBLIC HEALTH

Under the leadership of Reid Ewing, in collaboration with Center Affiliates Kelly Clifton and Carolyn Voorhees, the Center is positioned to become a national leader in research on the relationship between urban form, transportation and human health.

Measuring the Health Effects of Sprawl

Based on work begun at Rutgers University, Reid Ewing continues path-breaking work on measuring the health effects of urban sprawl. *Measuring the Health Effects of Sprawl: A National Analysis of Physical Activity, Obesity and Chronic Disease* is the widely publicized new report by Dr. Ewing and Barbara A. McCann. The report is the first national study to show a clear association between the type of place people live and their activity levels, weight and health. The popular version of the report was published by Smart Growth America and the Surface Transportation Policy Project in September 2003, while the technical peer-reviewed article upon which the report was based was published simultaneously in the *American Journal of Health Promotion*. The two received enormous newspaper, television and radio publicity throughout the United States and overseas and reached an estimated U.S. audience of 50 million people.

Environmental Determinants of Physical Activity

Reid Ewing is in the process of moving another Robert Wood Johnson Foundation funded study from Rutgers University to the University of Maryland.

Entitled "Identifying and Measuring Environmental Determinants of Physical Activity," this project will develop measurement methods for perceptual qualities of the urban environment viewed as important for walkability such as transparency and human scale, and will incorporate

these definitions into an illustrated manual suitable for lay observer training and field assessments.

School Location and Transportation Choices

A separate study funded by the U.S. Environmental Protection Agency and principally written by Dr. Ewing focused on the relationship between school location, the built environment around schools, mode choices for trips to school, and air emissions impacts of those choices.

Released on “Walk to School Day” (October 8, 2003) by EPA Associate Administrator Jessica L. Furey, the study found that students will be more likely to walk or ride bicycles to school if schools are built in proximity to where they live and if the nearby built environment is conducive to such non-motorized travel. The study was co-authored by William Greene of New York University.

New Street Design Guidelines and Standards

During fall 2003, Dr. Ewing worked with the City of Charlotte, North Carolina, on the development of new street design guidelines and standards that balance the needs of pedestrians and bicyclists with those of motorists. The most ambitious and well-funded project of its type, Dr. Ewing's specific contributions included several days of workshops to develop design elements ranging from street cross sections to pedestrian level of service measures, preparation of traffic calming audit procedures and case studies, and authorship of a traffic calming chapter that will become part of Charlotte's new Roadway Design Manual.

This work may have contributed to Dr. Ewing's successful competition as part of a national interdisciplinary team to develop new national street guidelines for the Institute of Transportation Engineers, Congress for the New Urbanism, and U.S. Environmental Protection Agency. This project will commence during the spring of 2004.

A Smart Step Forward

Center Affiliate Kelly Clifton leads the *Smart Step Forward* project funded by the Robert Wood Johnson Foundation.

A *Smart Step Forward* campaign strives to produce more walkable environments through changes to land use codes, implementation of demonstration projects, and community support for physical changes that produce a more walkable environment. By encouraging more physical activity, *A Smart Step Forward* seeks to address serious public health concerns such as cardiovascular disease, diabetes, asthma and obesity.

This project was launched in 2001 by the Governor's Office of Smart Growth and the Maryland Department of Health and Mental Hygiene. In 2002, the Robert Wood Johnson Foundation awarded a \$150,000 two-year grant to the National Center for Smart Growth at the University of Maryland to create pilot projects in three Maryland

communities. The *Smart Step Forward* project has identified the communities of Bel Air in Harford County, College Park in Prince George's County, and Turner's Station in Baltimore County, to serve as demonstration projects to show the effects of revising local codes and ordinances to create more walkable communities.

The project includes community surveys, audits of local zoning and subdivision codes, public workshops and implementation projects. These three case studies will illustrate the interaction between local codes and walkability in each community, detailed efforts to improve the codes in the three communities, and document project successes and challenges overall. In addition to these case studies, the final report will also contain a "tool-kit" that synthesizes the lessons learned from the three case studies, thus making the information relevant and transferable to different types of communities, from very walkable to very automobile-dependent, within Maryland and throughout the nation.

Community Characteristics and Physical Activity Among Adolescent Girls

Dr. Carolyn C. Voorhees, a Center Affiliate, has been working with the National Institutes of Health, the National Heart, Lung and Blood Institute, Dr. Knaap and Dr. Deborah Young on a project investigating the ways in which community characteristics can affect the level of physical activity engaged in by adolescent girls.

Dr. Voorhees's research will form an ancillary study to the four year, National Heart, Lung and Blood Institute-funded multi-centered Trial of Activity for Adolescent Girls, a group (school)-randomized controlled intervention trial to increase physical activity among a cohort of sixth grade girls over 2.5 years. The parent NIH-funded Trial of Activity for Adolescent Girls study will be collecting measures of physical activity using both self-reporting and accelerometers, small monitors worn at the hip that record acceleration and deceleration of movement without the need for any reporting from the participants. Using a radius of 5 miles around each participating school in the study and around the homes of each study participant, the study plans to gather information documenting proximity of recreational facilities, street design, population density, population mix (ethnic/age distribution), crime, availability of mass transit, neighborhood socioeconomic status, geographic elevations and topography and types of land use.

Using hierarchical linear modeling, with girls nested within neighborhoods, while controlling for individual level factors such as race and socioeconomic status, researchers intend to investigate the relationship of the environment to individual physical activity. In addition, by following girls over time, researchers plan to investigate whether the effect of the TAAG intervention will be modified by community characteristics.

This study will be unique in its scope of exploring the role of community environments in physical activity across six very different urban suburban and rural areas: San Diego, Calif., Minneapolis, Minn., Baltimore, Md., New Orleans, La., Tucson, Ariz., and Columbia, S.C.

Pedestrian Safety Modeling

With support from the Highway Safety Office of the Maryland State Highway Administration, Center Affiliate Kelly Clifton and Research Associate Jungyul Sohn lead a project to identify areas within Prince George's County, Md., and the City of Baltimore where pedestrians are exposed to the highest risk of collision with vehicular traffic.

Like most communities around the country, both Prince George's County and the city of Baltimore have good information on where pedestrian-vehicular conflict exist, but have much less information regarding the actual pedestrian risk at these locations. To identify sites of high pedestrian risks, the Center will develop pedestrian transportation models that will produce forecasts of pedestrian traffic.

HOUSING AND COMMUNITY DEVELOPMENT

At present, the Center is engaged in a search for a scholar to provide leadership in the area of housing and community development. Two projects led by Gerrit Knaap and Jungyul Sohn, however, best fit in this category.

Trends in Maryland Housing Markets

Dr. Knaap and Dr. Sohn worked with the Maryland National Capital Building Industry Association and the Home Builders Association of Maryland to conduct an analysis of housing trends in the Baltimore and Washington corridor. The Center collected subdivision and rezoning information from 15 of Maryland's 23 counties.

The resulting report, *Smart Growth, Housing Markets, and Development Trends*, published in November 2003, concluded that constraints on development appear to be limiting the production of new housing in Maryland, adversely affecting affordability in the Baltimore and Washington suburbs, and deflecting growth to outlying counties.

The results of the study were presented by Dr. Knaap at a meeting of the Maryland National Capital Building Industry Association and at the Annual Growth Conference sponsored by the Home Builders Association of Maryland. Dr. Sohn also presented results at the meetings of the Regional Science Association in Philadelphia. Additional presentations are scheduled for 2004.

Zoning as a Barrier to Affordable Housing

With concerns about a national shortage of affordable housing, the U.S. Department of Housing and Urban Development, in collaboration

with the Fannie Mae Foundation and the Lincoln Institute of Land Policy, has provided funding to the Center for Smart Growth to explore whether certain forms of zoning are barriers to affordable housing.

Because systematic evidence of the effects of exclusionary zoning is scarce, the objective of this project is to document and examine, on a pilot basis, whether zoning impedes the development of high-density or multi-family housing in growing metropolitan areas. The project involves the collection and assembly of GIS data from five to 10 metropolitan areas around the country.

Using data visualization and econometric techniques, Center researchers will identify the influence of exclusionary zoning on the availability of multifamily housing. ECONorthwest, a Eugene, Oregon, consulting firm, and the American Planning Association are assisting on the project.

INTERNATIONAL URBAN DEVELOPMENT

Under the leadership of Chengri Ding, the Center has broadened its research and training agenda by creating an international urban development component that, at present, is heavily focused on the effects of the rapid urbanization process now underway in China.

China Land Policy and Urban Management Program

Led by Dr. Chengri Ding, the mission of the China Land Policy and Urban Management Program is to help the Chinese government better understand issues related to urban and land policy and taxation and to assist the Chinese in policy studies on issues related to urbanization. The project is funded by the Lincoln Institute of Land Policy.

Activities include training for scholars and officials both in China and in the United States; research on land use, urban and taxation policies; the convening of conferences, workshops, symposia, and roundtable discussions; production of publications; promoting an exchange of scholars; and demonstration projects.

To support this effort a Memorandum of Agreement between the Lincoln Institute and the Ministry of Land and Resources of the People's Republic of China was signed in 2002. Among the tasks envisioned under this agreement is a joint project with the Lincoln Institute designed to demonstrate the value of redesigning China's land policies and land management program as a means of more effectively managing land use in response to the nation's rapid rate of urbanization.

Additional agreements have also been forged between the Lincoln Institute and leading Chinese agencies, such as the Development Research Center of the State Council, a think tank in China, calling for joint conferences, training and research to help China better shape its urban policies in the era of rapid urbanization. The Lincoln Institute is

also establishing a relationship with the State Administration of Taxation, Ministry of Finance, and other universities and institutes.

World Bank Institute and Institute for Global Chinese Affairs

Allied with the Center's China Land Policy program is a cooperative arrangement with the Institute for Global Chinese Affairs, also located on the College Park campus, and the World Bank Institute. Under this arrangement, Dr. Ding and other Center staff are collaborating with the Institute for Global Chinese Affairs to develop an Executive Training Program on urban management and land policy for officials of the People's Republic of China. Under the terms of the agreement the Center is authorized to use the library of training materials developed by the World Bank Institute. To date, the Center and the Institute for Chinese Global Affairs have offered training programs to officials from Jaingsu and Hunan Provinces and are scheduled in 2004 to conduct training for officials from Guangzhou.

The Evolution of Land and Housing Markets in the Peoples Republic of China.

Pursuant to work begun while Chengri Ding was at Texas A&M University and Gerrit Knaap and Yan Song were at the University of Illinois, Dr. Ding and Dr. Song are editing a book on the evolution of land and housing markets in China. The papers were presented at a session of the World Planning Congress, organized by Dr. Knaap and Dr. Ding, in Shanghai. As part of its Program on Chinese Land Policy and Urban Management, the Lincoln Institute of Land Policy will publish the book in 2004.

Multifunctional Intensive Land Use (MILU)

As a consequence of three presentations given at universities in the Netherlands, Gerrit Knaap is participating in an international network of planning experts interested in advancing what in Europe is called "Multifunctional Intensive Land Use (MILU)," – a pattern of growth that in America might be known as Smart Growth. The project is sponsored by Habiforum—a Brookings-like organization in the Netherlands.

The goal of the MILU network is to analyze opportunities and constraints for the realization of innovative forms of multifunctional, intensive land use; and, to develop policies and instruments for the implementation of high quality MILU programs and projects. The MILU network will bring together organizations in and outside Europe that are actively involved in knowledge development, policy development and implementation of MILU. A conference jointly sponsored by Habiforum and the Center is planned for fall 2004 in Annapolis.

V. PAPERS AND PUBLICATIONS

Center staff and affiliates have been actively engaged in scholarly discourse and have made important contributions to the academic literature. Below are papers, books, and monographs published in refereed journals, by reputable external presses, and by the Center as working papers and reports.

Refereed Journal Articles:

Baum, H.S. In Press, Smart Growth and School Reform; What if We Talked About Race and Took Community Seriously? *Journal of the American Planning Association*.

Ding, C. 2002. Land policy reform in China: Assessment and property. *Land Use Policy*, 20: 109-120.

Ding, C. and G. J. Knaap. 2003. Property Values in Inner City Neighborhoods: The Effects of Homeownership. Housing Investment, and Economic Development, *Housing Policy Debate*. 13, 4: 701-727

Ewing, R., R. Pendall, and D. Chen. 2003. Measuring sprawl and its transportation impacts. *Transportation Research Record*. 1831: 175-183.

R. Ewing, T. Schmid, R. Killingsworth, A. Zlot, and S. Raudenbush. 2003. "Relationship Between Urban Sprawl and Physical Activity, Obesity, and Morbidity," *American Journal of Health Promotion*, 18: 47-57.

Ewing, R., R. Schieber, and C. Zegeer. 2003. Urban sprawl as a risk factor in motor vehicle occupant and pedestrian fatalities. *American Journal of Public Health*, 93: 1541-1545.

Ewing, R., R. Pendall, and D. Chen. 2003. "Measuring Sprawl and Its Transportation Impacts," *Transportation Research Record 1832*: 175-183.

Hopkins, L.D. and G.J. Knaap. In Press. Economies of Scale in Wastewater Treatment and Planning for Urban Growth, *Environment and Planning A*.

- Howland, M. 2003. Private Initiative and Public Responsibility for the Redevelopment of Industrial Brownfields: Three Baltimore Case Studies, *Economic Development Quarterly*. 17,4, 367-381.
- Howland, M. In Press. The Role of Contamination in Central City Industrial Decline, *Economic Development Quarterly*.
- Jantz, C. and Goetz, S.J. In Press. Scale dependencies in an urban land use change model. *International Journal of Geographic Information Systems*.
- King, M., M. Carnegie, and R. Ewing. In press. Pedestrian Safety through a raised median and redesigned intersections. *Transportation Research Record*.
- Knaap, G. J., C. Ding, L. Hopkins. 2002. Does planning matter? The effects of light rail plans on land values in station areas. *Journal of Planning, Education, and Research*. 21,1:32-39.
- Lynch, L., and S. Lovell. May 2003. "Combining Spatial and Survey Data to Explain Participation in Agricultural Land Preservation Programs," *Land Economics* 79(2):259-276.
- Moglen, G.E., S.A. Gabriel, J.A. Faria, 2003. A Framework for Quantitative Smart Growth in Land Development. *Journal of the American Water Resources Association*. 39,4: 947-959.
- Rajamani, J., C. Bhat, S. Handy, G. Knaap, and Y. Song. 2003. Assessing the impact of urban form measures in nonwork trip mode choice after controlling for demographic and level-of-service effects. *Transportation Research Record*. 1831: 158-165.
- Sohn, J., 2004. In Press. Information technology in the 1990s: more footloose or more location-bound? *Papers in Regional Science*.
- Sohn, J. 2004. Do birds of a feather flock together? : Economic linkage and geographic proximity. *Annals of Regional Science* 38,1: 1-27.
- Sohn, J., T.J. Kim, G.J.D. Hewings, J.S. Lee and S. Jang. 2003. Retrofit priority of transportation network links under an earthquake. *Journal of Urban Planning and Development* 129,4: 195-210.
- Sohn, J., T.J. Kim, and G.J.D. Hewings. 2003. Information technology and urban spatial structure: a comparative analysis on the

- Chicago and Seoul Regions. *Annals of Regional Science* 37,3: 447-62.
- Song, Y. In press. Comparing urban growth in U.S. metropolitan areas: A spatial analysis of urban form. *International Regional Science Review*.
- Song, Y and G. J. Knaap. 2003. The effects of new urbanism on housing values: A disaggregate assessment. *Journal of Urban Economics*. 54: 218 - 238.
- Song, Y. and G. J. Knaap. In press. Measuring urban form: Is Portland winning the war on sprawl? *Journal of American Planning Association*.
- Song, Y. and G. J. Knaap. In Press. Are mixed land uses marketable: reexamining consumers' preferences. *Regional Science and Urban Economics*.
- Talen, E. and G. J. Knaap. 2003. The implementation of smart growth principles: An empirical study of land use regulation in Illinois. *Journal of Planning Education and Research*. 22,4: 345-359.

External publications:

- Bolen, R., G. J. Knaap, and E. Seltzer. 2003. The Regional Land Information System: The Virtual Key to Portland's Growth Management Success. Cambridge, MA: The Lincoln Institute of Land Policy.
- Cohen, J. R. 2002. Maryland's 'Smart Growth': Using Incentives to Combat Sprawl. Ch. 11 in Gregory Squires (ed.), *Urban Sprawl: Causes, Consequences and Policy Responses*. Washington, DC: Urban Institute Press. Pp. 293-324.
- Ding, C. 2004. The effects of land acquisition on China's economic future. *Landlines*. 16,1: 11-13.
- Ding, C. 2002. Urban Spatial Development in the Land Policy Era: Evidence from Beijing. Cambridge, MA: Lincoln Institute of Land Policy.
- Ding, C. and G. J. Knaap. 2002. Urban Land Policy Reform. *Landlines*. 15, 2: 2-3.

- Ding, C. and G. J. Knaap. 2002. *Land Values and the Emergence of Land Markets in Beijing, China*. Cambridge, MA: Lincoln Institute of Land Policy.
- Ding, C. and Y. Song, in Press. *The Emergence of Land and Housing Markets in the Peoples Republic of China*, Cambridge, MA: Lincoln Institute of Land Policy.
- Ewing, R. and W. Greene. 2003. *Travel and Environmental Implications of School Siting*. Washington, DC: U.S. Environmental Protection Agency.
- Holler, E and G.J. Knaap, 2003, *Web-based Planning: A Survey of Local Government Websites*, Planning Advisory Service Memo, Chicago, IL: American Planning Association.
- Knaap, G.J. forthcoming. Comment. in Anthony Downs, ed, *Growth Management and Affordable Housing*. Washington, DC: Brookings Institution.
- Knaap, G.J. In Press. *Monitoring Land & Housing Markets: An Essential Tool for Smart Growth*, Washington, DC: National Center for Housing and the Environment.
- Geoghegan, J., L. Lynch and S. Bucholtz. April 2003. "Capitalization of Open Spaces: Can Agricultural Easements Pay for Themselves," *Agricultural and Resource Economic Review*, 32(1):33-45.
- Geoghegan, J., L. Lynch and S. Bucholtz. August 2002. "Capitalization of Open Space into Housing Values and the Residential Property Tax Impacts of Agricultural Preservation Programs," *Conserving Farm and Forest in a Changing Rural Landscape: Current and Potential Contributions of Economics*, Northeast Regional Center for Rural Development, Regional Rural Development Paper No. 11.
- Knaap, G. J. 2002. An Inquiry into the Promise and Prospects of Smart Growth, in Andre Sorensen, Peter Marcotullio and Jill Grant, ed.s, *Managing Urban Change: Global Perspectives on Sustainable Cities*. Ashgate Publishers.
- Knaap, G. J. 2003. Government policy, smart growth, and the spatial pattern of development in the United States, in Faaij, F, J. Niemans & H. Verdonk, eds. *Creatief Ruimtegebruik, de rol van de overheid ondersteboven*. The Netherlands.

- Knaap, G. J. 2003. Talking Smart in the United States. *In Quest for Partners in Research on Multifunctional and Intensive Land Use*. H Haccou and D. Middleton, ed.s, Gouda, The Netherlands: Habiforum.
- Knaap, G. J. ed. 2001. *Land Market Monitoring for Smart Urban Growth*. Cambridge, MA: The Lincoln Institute of Land Policy.
- Knaap, G. J. and T. Severe. 2001. Monitoring Residential Land Markets, in Gerrit J. Knaap, ed. *Land Market Monitoring for Smart Urban Growth*. Cambridge, MA: Lincoln Institute of Land Policy.
- Lynch, L. In Press. "Protecting Farmland: Why do we do it? How do we do it? Can we do it better?" *Land Use Problems and Conflicts: Causes, Consequences, and Solutions*, S. Goetz, J. Shortle and J. Bergstrom, eds., Routledge Economics, UK.
- Lynch, L., and S. Lovell. October 2003. "Local Land Markets and Agricultural Preservation Programs," *Government Policy and Farmland Markets: The Maintenance of Farmer Wealth*, eds. Charles B. Moss and Andrew Schmitz, Iowa State Press, Ames, IA.
- Nelson, A. C., R. Pendall, C. Dawkins, and G. J. Knaap. 2002. *The Link Between Growth Management and Housing Affordability: The Academic Evidence*. Discussion Paper. Washington, D. C.: Brookings Institution
- Sohn, J., G.J.D. Hewings, T.J. Kim, J.S. Lee and S. Jang. In Press. Analysis of economic impacts of an earthquake on transportation network. Y. Okuyama and S.E. Chang (eds.) *Modeling Spatial Economic Impacts of Disasters*, Springer-Verlag, Berlin, Germany.
- Song, Y. and G. J. Knaap. 2002. *Are mixed land uses marketable*. Cambridge, MA: Lincoln Institute of Land Policy.
- Song, Y., G. J. Knaap and C. Ding. 2002. Review on China Housing Policy since 1949. in C. Ding, and Y. Song. ed.s, *China Housing and Land Policy Reform*, Lincoln Institute of Land Policy.
- Song, Yan and G. J. Knaap. In Press. *Differences and Trends in Urban Development Patterns: A Intermetropolitan Analysis*. Washington, DC: The Brookings Institution.

Wiewel, W. and G. Knaap, ed.s, In Press. *Smart Growth and the Academy: University Efforts to Promote Smarter Growth*, New York NY: M. E. Sharpe.

Working papers, Conference Papers and reports:

Brower, S. Locust Point: Toward a Community Plan. University of Maryland Community Planning Studio Spring 2002.

Budic, Z. and G.J. Knaap. 2003. Data Integration for Metropolitan Planning: The National Status Quo, Urban and Regional Information Systems Association 41st Annual Conference, Atlanta, GA.

Budic, Z. and G.J. Knaap. 2003. GIS Capacity for Urban Planning: Status & Requisites GIS Technology: Sustaining the Future & Understanding the Past: Invitational Conference, Case Western Reserve University, Cleveland, OH.

Clifton, K. and A. Livi. January 2004. "Issues And Methods In Capturing Pedestrian Behaviors, Attitudes And Perceptions: Experiences With A Community-Based Walkability Survey", Annual Meeting of the Transportation Research Board, Washington, DC.

Cohen, J. and I. Preuss. 2002. An Analysis of Social Equity Issues in the Montgomery County Transfer of Development Rights Program, College Park, MD: National Center for Smart Growth.

Cohen, J. 2003. "Water Supply as a Factor in Local Growth Management in the U.S.: A Review of Current Practice."

Gabriel, S., J. Faria, and G. Moglen. In Review. A multiobjective optimization approach to smart growth in land development. *Socio-Economic Planning Sciences*.

Geoghegan, J., L. Lynch and S. Bucholtz. June 2001. "Value of Open Space," NorthEast Agricultural and Resource Economics Association Annual Meetings, Bar Harbor, MN.

Geoghegan, J., L. Lynch and S. Bucholtz. June 2002. "Capitalization of Open Space into Housing Values and the Residential Property Tax Impacts of Agricultural Preservation Programs," NorthEast Agricultural and Resource Economics Association Land-use Workshop, Camp Hill, PA.

- Knaap, G., J. Sohn, J. Frece, and E. Holler. 2003. Smart Growth, Housing Markets, and Development Trends in the Baltimore-Washington Corridor. Prepared for the Maryland National Capital Building Industry Association and the Home Builders Association of Maryland. College Park, MD: National Center for Smart Growth.
- Lynch, L. and S. J. Lovell. June 2001. "Hedonic Price Analysis of Development Rights Payments NorthEast Agricultural and Resource Economics Association Annual Meetings, Bar Harbor, MN.
- Lynch, L. and S. J. Lovell. July-August 2001. "Factors Influencing Participation in Agricultural Land Preservation Programs," American Agricultural Economics Association Annual Meeting, Chicago, IL.
- Lynch, L. February 21-22, 2002. "Farmland Preservation: How Are We Doing?" Land Use Problems and Conflicts: Causes, Consequences and Solutions Workshop, Orlando, Florida.
- Lynch, L. and H. Gonzalez. June 2002. "Evidence of an Impermanence Syndrome: Is Farmer Investment Altered by the Surrounding Land-Use?" NorthEast Agricultural and Resource Economics Association Annual Meetings, Camp Hill, PA.
- Lynch, L. October 2002. "Land-Use Trends for Working Landscapes on the Upper Eastern Shore" Working Landscapes Task Force, Wye Mills, MD.
- Lynch, L. July 27-30, 2003. "Do Agricultural Preservation Programs and Preferential Property Tax Programs Affect Farmland Conversion?" American Agricultural Economics Association Annual Meeting, Montreal, Canada.
- Lynch, L. August 2003. "Farmland Loss – Is this a Major Issue for the Poultry Industry," Governor's Poultry Task Force, Salisbury, MD.
- Sohn, J. and G. Knaap. 2002. Does Job Creation Tax Credit Program in Maryland Induce Spatial Employment Growth or Redistribution? Prepared for the 49th Annual North American Meetings of the Regional Science Association International. Philadelphia, PA.
- Sohn, J. 2002. Information Technology in the 1990's: More Footloose or More Location-bound? Presented at the 44th Annual Association of Collegiate Schools of Planning Conference. Baltimore, MD.

- Song, Y., J. Sohn, and G. Knaap. 2003, Urban Growth in U.S. Metropolitan Areas: Quantitative Analysis of Urban Form. The 50th Annual North American Meetings of the Regional Science Association International, Philadelphia, PA.
- Song, Y. and G. Knaap. 2002. Analyzing Changing Demographics and Urban Spatial Structure. ACSP Conference, Baltimore, MD.
- Song, Yan and G. Knaap. 2002. The Virtues of New Urbanism: A Quantitative Assessment. ACSP Conference, Baltimore, MD.
- Rajamani, J., S. Handy, G. Knaap and Y. Song. 2003. Assessing the Impacts of Urban Form Measures in Nonwork Trip Model Choices after Controlling for Demographic and Level-of-service Effects. Transportation Research Board 82nd Annual Meeting, Washington DC.

VI. SMALL GRANTS PROGRAM

In each of the past three years, the Center has provided small grants to affiliated faculty at the University of Maryland to launch a variety of Smart Growth related research projects. These small grants or summer stipends of approximately \$20,000 each are designed to expand the scope of Smart Growth research and take advantage of the intellectual range of campus faculty. Selections are based on the recommendations of an interdisciplinary faculty review panel.

Smart Growth as a Multi-objective Optimization Problem

Lead Persons: Steven Gabriel (Civil Engineering) and Glenn Moglen (Civil Engineering)

Description: This project approaches Smart Growth as a problem that includes the multiple objectives of housing development, water quality management, local government finance, and transportation engineering. By specifying a multiple objective optimization problem, the research will provide insights into the trade-offs of the multiple objectives.

This project has produced two papers by Drs. Gabriel, Moglen and J.A. Faria: “A Multi-Objective Optimization Approach to Smart Growth in Land Development,” in review at the *European Journal of Operational Research*, and “A Framework for Quantitative Smart Growth in Land Development,” published in the *Journal of the American Water Resources Association*.

Education, Social Equity, and Smart Growth

Lead Persons: Howell Baum (Urban Studies and Planning)

Description: This project provides a critical exploration of the relationship between education, social equity, and Smart Growth. It begins with the premise that Smart Growth cannot be achieved without attending to matters of race, education, and social equity.

This project has produced the paper, “Smart Growth and School Reform: What If We Talked About Race and Took Community Seriously?” by Dr. Baum, published in the *Journal of the American Planning Association*, January 2004.

Obstacles to the Redevelopment of Urban Brownfields

Lead Persons: Anna Alberini (Architecture, Planning and Preservation)

Description: This project explores obstacles to brownfield redevelopment. Using statistical analyses of the relationships among environmental variables, property values, and property sales, it attempts to identify optimal strategies for stimulating brownfield redevelopment.

Locational Preferences of Immigrant Communities

Lead Person: Shenglin Chang (Landscape Architecture)

Description: This project explores the changing locational preferences of Asian immigrants. Using survey techniques, the research seeks to identify why immigrants who come from high density residential environments choose to locate in suburban environments after immigrating to the United States.

Priority Funding Areas and Local Investments in Sewer Infrastructure

Lead Persons: Marie Howland (Urban Studies and Planning)

Description: This project examines the efficacy of Maryland's Priority Funding Areas. Using detailed information on investments in sewer infrastructure by local governments it seeks to identify the extent to which Maryland's Priority Funding Areas serve to contain urban sprawl.

This project produced the paper, "Will Maryland's Priority Funding Areas Initiative Contain Urban Sprawl?" by Drs. Howland and Jungyul Sohn.

Smart Sprawl

Lead Person: Sidney Brower (Urban Studies and Planning), Ronit Eisenbach (Architecture, Planning and Preservation), and Jack Sullivan (Landscape Architecture)

Description: This research is intended to test the hypothesis that people consider the vanishing countryside – more precisely, the loss of easy visual access to landscapes that are perceived to be natural – to be an adverse effect of development, and those development patterns that do more to retain the appearance of “natural” countryside, even if they are low density, will be considered to be less sprawling. The research design calls for testing people’s responses to computer-generated images that simulate movement through alternative low-density site layouts in two different types of landscape.

Modeling the effects of Land Use Policies on Urban Land Use Patterns in Maryland

Lead Person: Scott Goetz (Geography)

Description: This research will develop a modeling tool that can be used to evaluate, visually and quantitatively, the potential impacts of user-defined land use policy scenarios. A paper, “Scale Dependencies in an Urban Land Use Change Model,” was published in the *International Journal of Geographic Information Systems*.

Effect of Local Land Use Regulations on the Configuration of Residential Subdivisions in Maryland

Lead Person: Erik Lichtenberg (Agriculture and Resource Economics)

Description: This project will analyze the role that subdivision regulations play in urban development patterns in Maryland.

Do Farmland Preservation Programs Affect Farmland Conversion? Evidence from Six Mid-Atlantic States Over 50 years

Lead Person: Lori Lynch (Agriculture and Resource Economics)

Description: Extending the analysis on whether a critical mass of farmland exists, this project examines the effect of state and local agricultural preservation programs in six Mid-Atlantic States, which experienced a 47% decrease in farmland between 1949 and 1997. A

paper, “Combing Spatial and Survey Data to Explain Participation in Agricultural Land Preservation Programs,” was published in *Land Economics*.

Adaptation to Climate Change Through Smart Growth

Lead Person: Matthias Ruth (Public Affairs)

Description: This project will be the first to simultaneously build on Smart Growth research, which points towards environmental benefits of alternative strategies, and on climate adaptation research, which points towards implications for local and regional land use and development.

Social Impacts of Historic Preservation: Connections Between Neighborhood Change And Historic Preservation Policy

Lead Persons: Alex Chen (Urban Studies and Planning), Randy Mason (Architecture, Planning and Preservation), and Mary Konsoulis (Architecture, Planning and Preservation)

Description: This project will explore the connections between neighborhood change and historic preservation policy through the use of social data and social-scientific analytical methods.

Brownfield Redevelopment in the Baltimore Metropolitan Area

Lead Persons: Marie Howland (Urban Studies and Planning)

Description: This project explores the efficacy of Maryland’s brownfield redevelopment program on redevelopment activity in the Baltimore metropolitan area.

This project has produced two papers: “Private Initiative and Public Responsibility for the Redevelopment of Industrial Brownfields: Three Baltimore Case Studies,” and “The Role of Contamination in Central City Industrial Decline,” both published in *Economic Development Quarterly*.

Telecommunications and Smart Growth

Lead Persons: Qing Shen (Urban Studies and Planning)

Description: This project examines the role that telecommuting will have on residential and employment location patterns. The project includes the preparation of a literature review paper and a proposal for submission to the National Science Foundation.

VII. EDUCATION AND TRAINING

The Center's educational mission complements its research agenda. In Maryland as well as in many other states and countries, decision-makers are increasingly asked to promote smarter patterns of growth, but often are inadequately trained for the task or are overwhelmed by the pressure for new development. The Center has responded to this need by developing a range of educational offerings or opportunities.

Smart Growth Leadership Program

The Smart Growth Leadership Program has been offered by the university on six occasions, sometimes geared to a national audience, sometimes to a Maryland-specific audience and sometimes to a combination of both. This five-day program was most recently offered in both the spring and fall 2003 and will be offered again in spring 2004. The Center has drawn together faculty for this course from various academic departments at the University as well as practitioners, elected and appointed, from all levels of government as well as from the non-profit advocacy world.

The Smart Growth movement has brought together diverse interest groups searching for strategies to channel economic and residential development in ways that sustain the natural environment and supports existing communities. Although the format and content of the Maryland Smart Growth Leadership Program have evolved over the years, the program provides state and local officials as well as representatives from the private sector with the practical knowledge and skills needed to lead their agencies, jurisdictions or companies in making more informed policy decisions as they relate to land use.

This objective, non-ideological, issues-based program draws on the variety and depth of experience among the participants and seeks to provide new perspectives and ample opportunity for disciplined dialogue. Those attending this program find that it strengthens their capacity for leading the changes in policies and culture within and between their agencies, jurisdictions and institutions – changes that involve complex decisions about land use, planning and the many other dimensions of Smart Growth.

Led by Judy Sorum Brown, Jim Cohen of the University of Maryland's Urban Studies and Planning program, and Center Communications Director John W. Frece, this program explores:

- The core principles of Smart;
- The basics of planning, zoning and the legal/constitutional context of land use;
- The implications of major infrastructure decisions – roads, sewer and water, and utility planning – and strategies to deal with related fiscal issues;

- The forces and unintended consequences of public and private actions that contribute to sprawl, such as social equity impacts;
- The various policy tensions and conflicts that exist among governmental programs and private actions affecting development patterns and how to identify common ground and areas for collaboration; and
- The ways in which participants can take a more effective leadership role in the area of land use policy.

Course Offerings

National Smart Growth Leadership Program

- Fall 2000
- Spring 2002

Maryland Smart Growth Leadership Program

- Fall 2001
- Spring 2002
- Spring 2003
- Fall 2003
- Spring 2004 (scheduled)

Certificate Course in Urban Planning

The University of Maryland, in conjunction with the Maryland Department of Planning, has developed a two-day planning course for volunteer planning commissioners, zoning board members, real estate practitioners, elected and appointed officials and others responsible for making decisions about future growth and development in localities across Maryland. The course, led by Professor Jim Cohen of the Urban Studies and Planning Department, covers such topics as planning and zoning law and regulations; Smart Growth; innovative planning tools; housing issues; and Smart Codes.

Upon completion of the course, participants receive a Certificate from the University of Maryland and MDP. The course is offered four times a year in various locations around the state.

Maryland Real Estate Licensees may receive up to seven hours of continuing education credits for professional enhancement only.

Smart Growth Study Tours

Faculty, staff and affiliates of the Center have provided, at the request of groups from various states or countries, study tours and visits to key Smart Growth sites in Maryland and elsewhere. Maryland offers a rich array of Smart Growth projects, sites and programs for visiting groups to visit and explore. These tours help those from other

jurisdictions determine the most successful Smart Growth strategy for them to pursue at home.

Architect Ralph Bennett, an affiliate from the School of Architecture, Planning and Preservation, led a tour of the Kentlands and King Farm developments for a delegation visiting from Canada.

John Frece, communications director at the Center, led a study tour for a group from Jiangsu Province in China on a bus tour through East Baltimore and a walking tour of the Westside Renaissance project in West Baltimore. The group also toured the Bethesda Row project in Montgomery County. A similar trip is already planned for a group visiting from Guangzhou in 2004.

VIII. EDUCATIONAL OUTREACH AND MEDIA COVERAGE

Web Site

The National Center for Smart Growth realizes its education mission, in part, through the creation and maintenance of a Center web site: www.smartgrowth.umd.edu.

Over the past year, the web site has been completely overhauled, adding a new look, new organization, graphics, photographs and information. The page now features updated news about Center research, educational offerings, community outreach, new studies and other activities.

The web site provides tools and resources for planners, academics, and public officials, including research papers or other publications authored by Center and affiliated faculty, research abstracts, and partnered research.

It includes faculty and staff biographies, a listing of affiliated faculty, and a message from the Executive Director.

The web site also includes information on training courses, and GIS applications and data sources and includes links to other centers and organizations working in Smart Growth.

National Geographic Maryland Smart Growth Maps

Center staff worked with the Maryland Office of Smart Growth, the Maryland Department of Education, the Maryland Department of Planning and National Geographic Maps (a subsidiary of the National Geographic Society) to develop a Maryland Smart Growth/National Geographic Wall Map and accompanying web page (www.mdp.state.md.us/national_growth/index.htm).

These maps are being used in public schools, outreach programs and elsewhere to expand understanding of the interplay of geography, environment, and growth issues among students and the general public. The map is also the focus of lesson plans included in a new Smart Growth high school Teachers' Resource Guide created by the State of Maryland in conjunction with the National Center (see below).

These products benefit from the sophisticated development and land use data collected and maintained by the State of Maryland, the state's nationally recognized Smart Growth policies, and the National Geographic Society's internationally recognized mapping and educational expertise.

The Center and its other partners in this project were recently recognized for their work on the National Geographic Smart Growth Map. This map received the Best in Category award for "professional thematic" maps at the 2003 American Congress for Surveying and Mapping Map Design Competition.

Maryland High School Teachers Resource Guide

The State of Maryland has developed a package of resources and lesson plans to support high school social studies and science teachers in integrating topics related to growth and development within the regular curriculum. Government, policy and planning, economics, geography, and a myriad of environmental issues are encompassed with the Smart Growth concept, and Smart Growth provides a rich source of topics for classroom investigations.

The goal of the Teachers Resource Guide is to facilitate the involvement of teachers and students in authentic government and environmental issues. This guide includes a discussion of issues-based instruction; sample lesson plans; additional resource materials; and examples of action or service learning projects. It is accompanied by a website that contains the text of this guide, an electronic copy of Picture Maryland, as well as the data, maps, and other resources referenced in each lesson.

Partial funding for this project from the Rauch Foundation has been administered by the National Center for Smart Growth.

Center staff is now developing a proposal to use the Maryland Teachers' Resource Guide as a template to help other states or local jurisdictions develop their own Smart Growth/land use Teachers' Resource Guide or curriculum for high schools.

Media Coverage

Coincident with the expansion of the Center's research staff and the completion of certain research projects and papers, media coverage of Center activities started to increase during 2003.

Center Executive Director Gerrit Knaap, for example, spoke about Smart Growth issues at a number of public forums, including a Smart Growth conference in Queen Anne's County and at housing and growth conferences sponsored by the Department of Housing and Community Development and the state homebuilders' associations, respectively. He and Mr. Frece both provided Smart Growth briefings to legislative committees in 2003.

Dr. Knaap also was regularly interviewed by news reporters regarding specific development projects or trends in Maryland and elsewhere and was also asked to comment on Smart Growth initiatives pursued by the new administration in Annapolis. Jim Cohen, an affiliated faculty from the Urban Studies and Planning Department, represented the Center on a special Kojo Nnamdi show aired on WAMU radio in Washington.

In addition, the Center's report on Housing Markets in the Baltimore-Washington corridor received coverage in local Maryland newspapers.

In September 2003, a delegation from the Lincoln Institute of Land Policy that included Dr. Knaap and Dr. Ding jointly visited China to conduct training and perform a number of other tasks, including

attending a ceremony marking the publication of two of Dr. Knaap's books that have been translated into Chinese. Dr. Knaap's two days of training on Smart Growth and the theory and practice of land monitoring drew national attention. The event was televised on the central China TV station and his interview on land management policy in China was reported in full page coverage in the national newspaper as well as coverage on a prominent Chinese web site.

A November 2003 report by the Center on housing trends in the Baltimore-Washington corridor received coverage in the *Baltimore Business Journal* and prompted interviews from other publications, including the *Baltimore Sun*. Smart Growth initiatives by the new administration in Annapolis also resulted in interviews of Dr. Knaap that appeared in the *Baltimore Sun*, the *New Urban News* and was circulated on the web by the Smart Growth Network.

Reporters at the *Wall Street Journal* and the *Atlanta Journal-Constitution* interviewed Dr. Knaap concerning a Center report on the characteristics of New Urbanist developments that command a price premium for home buyers – and those characteristics that do not. Other papers around the nation carried stories about the study as well, including the *Milwaukee Journal* and the *Business Journal of Portland* (Oregon).

The *Washington Post* also ran an article by Dr. Knaap and Mr. Frece about ways to make the Smart Growth program in Maryland more effective. The piece appeared in the "Close to Home" section on January 4, 2004. Many of these articles were also picked up for national distribution by the internet service on land use issues known as *Planetizen*.

Research Professor Reid Ewing was also quoted in a story in the *Washington Post* regarding the difficulties pedestrians face walking in communities built to accommodate automobile use.

Sprawl and Obesity Study Media Coverage

No activity at the Center, however, came close to getting the extensive newspaper, wire service, radio and television coverage that was associated with the release of Dr. Reid Ewing's report, *Measuring the Health Effects of Sprawl: A National Analysis of Physical Activity, Obesity and Chronic Disease*. The report, co-authored by public policy expert Barbara A. McCann, was the first national study to show a clear association between the type of place people live and their activity levels, weight and health.

Stories about this study ran in the four national major daily newspapers: *USA Today*, *The Wall Street Journal*, *The New York Times* (Associated Press wire story and House/Home section story) and *The Washington Post* (A-section story and column). The Associated Press and

UPI each filed two wire stories. Reuters and Gannett News Service also produced wire stories.

By year's end, at least 58 pieces related to the sprawl and health study appeared in the top 50 U.S. daily newspapers (ranked by circulation). These pieces included original stories, wire stories and editorials printed by the outlets. Total circulation for the 58 pieces is 26,522,377.

In addition, Dr. Ewing's study was featured in nearly a dozen reports on CNN, reaching 2,634,330 viewers. ABC News interviewed Dr. Ewing and Michael O'Donnell, *American Journal of Health Promotion* editor, for a Good Morning America piece. Dr. Ewing was also interviewed for a CBS MarketWatch story.

Local television stations nationwide broadcast a video news release on the sprawl study produced by The Robert Wood Johnson Foundation Television Health Series project. The VNR package generated 447 stories, which aired on 233 stations in 121 markets reaching an audience of 21.1 million viewers.

National radio outlets showed a high level of interest in the journals and sprawl study. National Public Radio aired a story on *All Things Considered* and featured Dr. Ewing on its talk show, *Talk of the Nation*. CBS Radio News, ABC Radio News and Associated Press Radio News also produced stories.

A number of international media outlets also covered the release of the sprawl study. Coverage included, but was not limited to, reports from BBC News, the *London Evening Standard* and the *Ottawa Citizen* (Canada).

Finally, the study received attention in specialty publications, such as health trade media, policy and advocacy organizations and associations. HealthScout, WebMD, *Realty Times*, Be Active New York State and the National Soft Drink Association are just a few of the dozens of health-related news and policy/advocacy/association outlets that featured the results of the journal and sprawl studies.

IX. CONFERENCES AND SYMPOSIA

The Center has been an active participant in and sponsor of Smart Growth related conferences and meetings.

- *1000 Friends Annual Meeting*: The Center co-sponsored the October 2001 annual meeting of the 1000 Friends of Maryland. The *Making Connections* seminar was held at the University's School of Architecture, and included presentations by then Governor Parris N. Glendening and University President Dr. C.D. Mote, Jr.
- *Technology Tools to Unlock Gridlock*: On January 17, 2002, the Center co-sponsored with the Potomac Conference, a working meeting on Regional Technology Tools to Unlock Gridlock Now. University of Maryland President, Dr. C.D. Mote, Jr., co-chair of the Potomac Conference, began the meeting, which was held on the University of Maryland campus. Approximately 150 of the region's business leaders were in attendance.
- *Prince George's County Business Forum*: On May 21, 2002, at the School of Architecture, the Center co-hosted a Smart Growth Forum with the Prince George's County Business Council. David Harrington, then Mayor of Bladensburg and Harriet Tregoning, former Special Secretary for Smart Growth for the State of Maryland, both spoke at the meeting.
- *Symposium on New Urbanism*: The University of Maryland School of Architecture and the Center hosted the 5th National Academic Symposium on New Urbanism and the 1st New Urbanism and Smart Growth Research Symposium May 3-5, 2002, in College Park. Approximately 150 people attended the Symposium and 40 moderators, presenters, and panel members participated. The keynote speakers were Maryland Governor Parris N. Glendening and Andres Duany of Duany Plater-Zyberk and Company. The three-day research symposium allowed architects, planners, and academics to come together for thoughtful discussion in a collegial atmosphere. Research was presented on the topics of transportation, technology and urban form, city patterns, environment, health, and social equity. The Symposium also included a tour and discussion of King Farm and Kentlands, Maryland, on Saturday afternoon, which allowed participants to see how new urbanism works on the ground. Papers presented at the symposium will be published as a special issue of the *International Regional Science Review*, co-edited by Emily Talen and Gerrit Knaap.

- Symposium on the APA's Smart Growth Legislative Guidebook:*
 The National Center for Smart Growth Research and Education, in cooperation with the Brookings Institution Center on Urban and Metropolitan Policy, the American Planning Association and the University of Maryland Law School, conducted a symposium on the APA's Smart Growth Legislative Guidebook in April 2003. The Guidebook is a diverse compendium of model legislation and recommendations for governmental bodies that are mulling changes to their development laws. It was completed in January 2002. The Guidebook has been widely acclaimed and has been part of land use and planning reforms from coast-to-coast. It has also generated some controversy. The purpose of the symposium was to engage in a productive, rational and interactive discussion of the Guidebook. The goal was to understand what the Guidebook is and what its limitations are, and what, if anything, it can do to help land use reform efforts already underway throughout the nation. Held at the Brookings Institution and attended by 50 to 60 policymakers, scholars and activists, papers presented will be published by the APA as part of its *Growing Smart Working Papers* series.
- Lincoln/Maryland Delegation to China:* In September 2003, a delegation from the Lincoln Institute of Land Policy that included Dr. Knaap and Dr. Ding jointly visited China to conduct training and perform a number of other tasks, including attending a ceremony marking the publication of two of Dr. Knaap's books that have been translated into Chinese. The University of Maryland professors conducted training courses for more than 150 high and middle level officials from the Ministry of Land and Resources from all over China. The delegation also met with officials from the Development Research Center of the State Council, the China Development Institute, and the State Administration of Taxation, as well as other groups. While in China, Drs. Knaap and Ding scouted for sites for two pending demonstration projects. One will be related to urban planning, jointly sponsored by the Lincoln Institute of Land Policy and the China's Ministry of Land and Resources. The other, which is still being developed, will be related to land and property taxation, which is likely to become part of major tax reform now scheduled to occur in 2007 or 2008. As a result, the Lincoln Institute's network is expanding to the Ministry of Finance and the State Administration of Taxation. Dr. Ding is orchestrating both demonstration projects.

- *Roundtable on International Property Taxation:* In December 2003, Dr. Chengri Ding represented the Lincoln Institute of Land Policy at a roundtable discussion on International Property Taxation jointly held in conjunction with the State Administration of Taxation of the People's Republic of China. The forum was held to help the Chinese better design a property taxation system, which is absent now. Dr. Ding was one of six members representing the Lincoln Institute. More than 40 high-level officials from the State Administration of Taxation participated.
- *Land Monitoring Symposia:* The National Center for Smart Growth and the Lincoln Institute co-sponsored three symposia on Land Monitoring. Held in Baltimore (Oct. 22, 2002), College Park, Md. (Feb. 28, 2003) and San Diego, Calif. (Aug. 11, 2003), the Symposia were comprised of local planning directors, developers, State representatives, and selected members of the development industry convened to address issues associated with the availability and affordability of land for residential development and the development of a land inventorying system.

X. POLICY ADVISING, CONSULTATION AND PRESENTATIONS

GERRIT-JAN KNAAP

Invited Lectures:

“The Inside Scoop on Smart Growth,” Smart Growth Symposium, Department of Urban and Regional Planning, University of Illinois, Champaign, Ill., September 2002.

“Government Policy, Smart Growth, and The Spatial Pattern of Development in the United States,” University of Utrecht, Utrecht, The Netherlands, October 2002.

“Housing Trends in the Baltimore Washington Corridor,” Annual Growth Conference, Baltimore, Md., December 2002.

“The State of Smart Growth in Maryland,” Maryland General Assembly, Annapolis, Md., January 2003.

“Smart Growth in the United States,” University of Amsterdam, Amsterdam, The Netherlands, February 2003.

“Land Market Monitoring,” World Bank Institute, Panama City, Panama, May 2003.

“Growth Management and Smart Growth: A Tale of Two States,” Boalt School of Law, University of California-Berkeley, Berkeley, Calif., March 2003.

“Scientific Foundations of Smart Growth,” School of Architecture and Urban Planning, University at Buffalo, Buffalo, N.Y., April 2003.

“Urban Growth Containment and Smart Growth, City of Athens,” Athens, Ga., June 2003.

“Managing Urban Growth,” Ministry of Land Resources, Beijing, China, July 2003.

“Land Market Monitoring and Growth Management,” Ministry of Land Resources, Beijing, China, September 2003.

“Housing Trends in the Baltimore-Washington Corridor,” annual Growth Conference, Ellicott City, Md., December 2003.

Conference Presentations:

“Demographics and Urban Form,” meetings of the Collegiate Schools of Planning, Baltimore, Md., November 2002.

“Death in the Rose City,” meetings of the Collegiate Schools of Planning, Leuven, Belgium, July 2003.

“A Cluster Analysis of Neighborhood Types,” meetings of the Regional Science Association, Philadelphia, Pa., November 2003.

Workshops:

“Web Technology and Urban Planning,” Lincoln Institute of Land Policy, Cambridge, Mass., October 2002

“The Smart Growth Legislative Guidebook,” Brookings Institution, Washington, D.C., April 2003.

“Can We Tell if Growth Management Aids or Thwarts Affordable Housing,” Brookings Institution, Washington, D.C., June 2003.

“Planning with Systems of Plans,” Lincoln Institute of Land Policy, Cambridge, Mass., December 2003.

REID EWING

Conference Presentations (Fall 2003)

"Measuring the Health Effects of Sprawl," National Teleconference on the Impact of the Built Environment on Health, Aug. 28, 2003.

"A Compelling Case for Addressing Public Health in Transportation and Land Use Policy," Congressional briefing, Washington, D.C., Oct. 2, 2003.

"Impact of Sprawl on Public Health," "Best Development Practices for Residential and Commercial Land Uses," and "Traffic Calming and New Development," lecture series, Champaign-Urbana Mass Transit District, Urbana, Ill., Nov. 13-14, 2003.

“Implications of Large Lot Zoning in the Countryside and Incrementally Moving Urban Service Boundaries,” Regional Rural Lands Symposium, Treasure Coast Regional Planning Council, Port St. Lucie, Fla., Dec. 5, 2003.

Workshops, Training Courses, and Expert Panels (Fall 2003)

Street Connectivity Workshop, Houston-Galveston Area Council, Houston, Tex., Sept. 24, 2003.

Express Streets Workshop, Houston-Galveston Area Council, Houston, Tex., Nov. 4, 2003.

Transportation Summit, Congress for the New Urbanism, Nashville, Tenn., Nov. 21-22, 2003.

Quantifying Smart Growth Workshops, Fehr & Peers Associates, Sacramento and Walnut Creek, Calif., Dec. 2-3, 2003.

Street Design Guidelines Workshop, City of Charlotte, N.C., Dec. 8-10, 2003.

Advisory Services Panel, Urban Land Institute (ULI), Federal Transit Administration, Washington, D.C., Dec. 17-19, 2003.

Consulting (Fall 2003)

Land Use Expert Panel for the Intercounty Connector Highway, Maryland State Highway Administration.

Street Design Guidelines, City of Charlotte, N.C.

Review of Approaches to Transportation Adequacy Measurement, HNTB.

Legal Challenge to Gainesville Comprehensive Plan, Sierra Club and Sustainable Alachua County (expert witness).

Traffic Calming Audits, City of Charlotte, N.C.

CHENGRI DING

Invited Lectures:

“Rationale of Urban Planning,” Zhenjiang City, People’s Republic of China, 2003.

“Urban Planning in the U.S.A.,” Zhejiang University, People’s Republic of China, 2003.

“What Should Urban Planning Do in the Emerging Markets in China?” Beijing Urban Planning Department, People’s Republic of China, 2003.

“Land Policy and Urban Infrastructure Financing,” to a group from Henan Province, Institute of Global Chinese Affairs at the University of Maryland, 2003.

“International Lessons of Urban Policy Reform,” to a group from Jiangsu Province, Institute of Global Chinese Affairs at the University of Maryland, 2003.

JUNGYUL SOHN

Invited Lectures

“Information Technology and Urban Spatial Structure: Policy Issues,” Smart Growth Leadership Program, School of Public Affairs, University of Maryland, Linthicum Heights, Maryland, June 2002.

“Information and Communication Technology and the Future of Cities,” Urban Management and Smart Growth, Institute for Global Chinese Affairs, University of Maryland, August 2003.

“Are Counties Cooperating with the State’s Smart Growth Legislation?,” URSP Fall 2002 Brownbag Series, Urban Studies and Planning Program, University of Maryland, September 2002.

Conference Presentations

“Some Issues in Addressing and Exercising IT Related Policies,” (panel), New Urbanism and Smart Growth A Research Symposium, College Park, Maryland, May 2002.

“Developable Land Supplies and the Price of Single Family Housing,” North American Regional Science Association 50th Annual Meeting, Philadelphia, Pennsylvania, November 2003.

“Information Technology in the 1990s: More Footloose or More Location-Bound?,” Association of Collegiate Schools of Planning 44th Annual Conference, Baltimore, Maryland, November 2002.

“Does Job Creation Tax Credit Program in Maryland Induce Spatial Employment Growth or Redistribution?,” North American Regional Science Association 49th Annual Meeting, San Juan, Puerto Rico, November 2002.

YAN SONG

Invited Lectures

“Developing Quantitative Urban Form Measures,” Smart Growth Symposium, College Park, Md., May 2002.

“Evaluating the Impacts of Land Use Planning/Regulation on Urban Land Market in Portland, Oregon,” presented with Gerrit Knaap at the 2002 International “Analysis of Urban Land Markets and the Impact of Land Market Regulation” Seminar, Lincoln Institute of Land Policy, July 2002.

Conference Presentations

“Analyzing Changing Demographics and Urban Spatial Structure,” presented with Gerrit Knaap at ACSP Conference, Baltimore, Md., November 2002.

“The Virtues of New Urbanism: A Quantitative Assessment,” presented with Gerrit Knaap, ACSP Conference, Baltimore, Md., November 2002.

“Urban Growth in U.S. Metropolitan Areas: Quantitative Analysis of Urban Form,” presented with Jungyul Sohn and Gerrit Knaap at the 50th Annual North American Meetings of the Regional Science Association International, Philadelphia, Pa., November 2003.

“Developable Land Supplies and the Price of Single Family Housing,” presented with Jungyul Sohn and Gerrit Knaap at the 50th Annual North American Meetings of the Regional Science Association International, Philadelphia, Pa., November 2003.

“Assessing the Impacts of Urban Form Measures in Non-work Trip Model Choices after Controlling for Demographic and Level-of-service Effects,” presented with J. Rajamani, S. Handy, and Gerrit Knaap, Transportation Research Board 82nd Annual Meeting, Washington D.C., 2003.

JUDY SORUM BROWN

Conference Facilitation

Facilitated annual retreat of the Maryland Council of the Arts, May 2003.

Facilitated dialogue on turning from violence to reconciliation for leaders of reconciliation efforts in particularly violent parts of the globe, for the Shambhala Institute for Authentic Leadership, Nova Scotia, June 2003.

Facilitator and consultant, Association of Maryland Agricultural Agents, summer 2003.

Facilitator and leadership instructor for Sea Grant Extension leaders from throughout the nation, sponsored by NOAA/EPA Smart Growth program, Washington, D C. November 2003.

Facilitator, Smart Growth Leadership Program Alumni meeting, Maritime Institute, Linthicum Heights, Md., Nov. 7, 2003.

Related activities:

Joined the editorial review board of the *OD* (Organizational Development) *Practitioner Journal*, summer 2003.

Faculty, Urban Libraries Council Executive Leadership Institute, 2002-2004.

Faculty, Michigan Community Arts Association Leadership Institute, 2003 and 2004.

JOHN W. FRECE

Conference Presentations:

“Maryland’s Smart Growth Initiative,” Citizens Planning and Housing Association, Baltimore, Md., July 9, 2003.

“Maryland’s Smart Growth Initiative,” St. Anne’s Episcopal Church, Annapolis, Md., Oct. 5, 2003.

Maryland land use presentation to delegation from Jiangsu Province, China, College Park, Md., Oct. 4, 2003.

“Maryland’s Smart Growth Initiative,” to delegation from Jiangsu Province, China, College Park, Md., Oct. 27, 2003.

“How to Shape the Smart Growth Message,” presentation to NOAA/EPA Smart Growth workshop, Silver Spring, Md., Nov. 5, 2003.

Discussion of National Center for Smart Growth activities, Smart Growth Leadership Program Alumni meeting, Linthicum Heights, Md., Nov. 7, 2003.

“Maryland’s Smart Growth Initiative,” Smart Growth Leadership Program, Linthicum Heights, Md., Nov. 12, 2003.

XI. FACILITIES AND RESOURCES

In summer 2003, the National Center for Smart Growth relocated from other offices on the College Park campus to a suite of newly refurbished offices in Preinkert Field House.

College Park is also just eight miles from Washington, D.C., which puts it in close proximity to federal agencies, most national associations, and the national news media, all of which create opportunities to expand and inform the debate about land use and urban revitalization.

GIS Laboratory

Continuing its education mission, the Center has equipped and staffed a new Geographic Information System (GIS) lab in Preinkert Field House to support its research and training activities. The ability to integrate GIS into the land use planning process is a critical first element in helping implement the wide array of legislative and policy initiatives that are now seen in a number of State and local governments. GIS also allows for an evaluation of the results of efforts to change development patterns.

The GIS capacities at the University are among the strongest in the United States, with The Regional Earth Sciences Applications Center producing some of the best GIS tools. The next challenge is to bring these tools, such as the ability to accurately map impermeable surface changes in a region, to the desktop of planners and decision makers.

The State Department of Planning donated access to Maryland Property View to the Center (a \$20,000 value) and, in turn, the Center is helping the Maryland Department of Planning develop GIS-based tools and products.

XII. FACULTY AND STAFF

Gerrit Knaap

Gerrit Knaap is Professor of Urban Studies and Planning and Director of the National Center for Smart Growth Research and Education at the University of Maryland. He earned his 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.

Dr. Knaap's research interests include the economics and politics of land use planning, the efficacy of economic development instruments, and the impacts of environmental policy. On these subjects, he has published articles which include "The Inventory Approach to Urban Growth Boundaries," in the *Journal of the American Planning Association*, "Measuring the Price Effects of Growth Controls," in *Policy Analysis and Management*; "The Fiscal Impacts of Detachment," in *State and Local Government Review*, "Managing Urban Growth for the Efficient use of Public Infrastructure," in *International Regional Science Review*; and "The Effects of Light Rail Plans on Residential Property Values," in the *Journal of Planning Education and Research*. For his paper, State Land Use Planning and Inclusionary Zoning, he received the Chester Rapkin award for the best paper published in Volume 10 of the *Journal of Planning Education and Research*.

Funding for his research, in excess of \$4.0 million, has been provided by the National Science Foundation, the Lincoln Institute of Land Policy, the U.S. Army Corps of Engineers, and numerous other federal, state, and local government agencies. Dr. Knaap is the co-author or co-editor of four books: Land Market Monitoring for Smart Urban Growth, The Regulated Landscape: Lessons on State Land Use Planning from Oregon, Spatial Development in Indonesia: Review and Prospects, and Environmental Program Evaluation: A Primer.

For the past year, Dr. Knaap has been assisted in his work by research associates Jungyul Sohn and Yan Song.

Reid Ewing

Reid Ewing is a Research Professor at the National Center for Smart Growth Research and Education and also serves as Associate Professor within the Urban Studies and Planning Program. Prior to his move to the University of Maryland in fall 2003, Dr. Ewing was Research Professor and Director of the Alan M. Voorhees Transportation Center at Rutgers University, overseeing the National Transit Institute and Transportation Policy Institute. He was also Research Director of the Surface Transportation Policy Project in Washington, D.C., the

recognized U.S. leader in transportation reform, and now serves on STPP's Research Advisory Board.

Dr. 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. Formerly, he served two terms in the Arizona legislature and worked on urban policy issues at the Congressional Budget Office.

Dr. Ewing has been the American Planning Association's top selling author since 1996, with two books to his credit. His *Best Development Practices* was the American Planning Association's best selling book three years in a row, 1997-1999. His *Traffic Calming State-of-the-Practice*, published by the Institute of Transportation Engineers and U.S. Federal Highway Administration, is projected (based on first year sales) to be one of the top selling books in ITE history. He is the author of three other books and many articles on growth management, community design, and traffic management, and speaks and consults widely on these subjects.

Dr. Ewing's recent research includes: the first national study of the relationship between the built environment and chronic health problems for the Robert Wood Johnson Foundation; a study of school location and its effects on student travel for the U.S. Environmental Protection Agency, also a first; development of sprawl indices for counties and metropolitan areas around the U.S. for Smart Growth America; and, a guidebook on context-sensitive highway design for the New Jersey Department of Transportation.

Chengri Ding

Chengri Ding is an Associate Professor of Urban Studies and Planning at the National Center for Smart Growth Research and Education as well as director of the Chinese Land Policy and Urban Management Program. The Chinese Land Policy program is co-sponsored by the University of Maryland and the Lincoln Institute of Land Policy in Cambridge, Mass. He earned his B.S. from Beijing Normal University, M.S. from Chinese Academy of Sciences, and Ph.D. from University of Illinois at Urbana-Champaign in regional planning.

Dr. Ding, an expert in international urban development, came to the University of Maryland from Texas A&M University in fall 2003. His research interests include urban economics, urban growth management and urban growth controls, housing and land studies, and applications of quantitative methods and GIS applications in planning and policy studies.

Dr. Ding's work with China includes training, research, conferences, workshops and demonstration projects for Chinese officials both in the United States and in the People's Republic of China. He also

has conducted training for Chinese officials in conjunction with the Institute of Chinese Global Affairs on the University of Maryland campus.

Dr. Ding's outreach efforts in China have included collaborative agreements with the Ministry of Land and Resources, the China Development Institute, the Ministry of Finance and the State Administration of Taxation, among others.

Dr. Ding's published articles include, "Urban Growth Boundary Model: A Formal Analysis," in the *Journal of Urban Economics*; "Property Values in Inner City Neighborhoods: The Effects of Homeownership, Housing Investment, and Economic Development," in the *Housing Policy Debate*; "Land Use Policy Reform in China: Assessment and Prospective," in *Land Use Policy*; "Do Plans Matter? Effects of Light Rail Plans on Land Values in Station Areas," *Journal of Planning Education and Research*; "Beyond Edge City: Job Decentralization and Urban Sprawl," in *Urban Affairs Review*; and "Managing Urban Growth for the Efficient Use of Public Infrastructure," in *International Regional Science Review*.

Jungyul Sohn

Jungyul Sohn is the Research Associate of the National Center for Smart Growth Research and Education.

Dr. Sohn holds a B.A. and M.A. degrees from Seoul National University, Korea, and Ph.D. degree from the University of Illinois, all in economic geography and regional science. Dr. Sohn's research interests include spatial agglomeration and industrial clustering, information technology and its spatial implication, applied spatial econometrics and GIS, transportation planning and modeling, commuting and urban spatial structure, and smart growth and its spatial impact assessment. On these subjects, he has published articles which include "Do birds of a feather flock together? economic linkage and geographic proximity," in *Annals of Regional Science* (2004), "Information technology in the 1990s: more footloose or more location-bound?" in *Papers in Regional Science* (2004); "Information technology impacts on urban spatial structure in the Chicago region," in *Geographical Analysis* (2002), "Agglomeration and trade: some additional perspectives," in *Regional Studies* (2002), "Agglomeration economies and intra-metropolitan location of firms: a spatial analysis on Chicago and Seoul," in *Journal of the Korean Geographical Society* (2001), and "Industrial structural change in the Korean economy between 1975 and 1995: Input-output analysis," in *Economic Papers* (2000). For his paper, "Do birds of a feather flock together?: economic linkage and geographic proximity," he received a finalist award for the 16th Annual Competition of the Charles M. Tiebout Prize in Regional Science, 2002.

Yan Song

Yan Song was formerly a Research Associate at the National Center for Smart Growth Research and Education and is now an Assistant Professor in the Department of City and Regional Planning at the University of North Carolina at Chapel Hill.

Her research has involved calculating measures of urban form for several U.S. metropolitan areas. She also has conducted inter- and intra-metropolitan analyses to identify differences and trends in various measures of urban form that might reflect differences in policy and regulatory frameworks. She also has developed improved ways of measuring "land use mixing;" refined the methodology of stated preferences in neighborhood choice among different demographic groups; and is incorporating Portland, Oregon, travel survey data into an urban form database to perform comprehensive modeling on possible links between travel behavior and community form.

She and Dr. Knaap have co-authored several papers, the most recent of which is entitled *New Urbanism and Housing Values: A Disaggregate Assessment*, published in September 2003 in the *Journal of Urban Economics*.

Judy Sorum Brown

Judy Sorum Brown, a longtime faculty and staff member at the University of Maryland who specializes in issues related to leadership, joined the staff of the National Center for Smart Growth in fall 2003 on a part-time basis as director of education, training and outreach.

Dr. Brown holds a Ph.D from Michigan State University and is best known for her work on dialogue and the leadership of change. She consults with leadership teams across all sectors, has served as Vice President of the Aspen Institute, as a White House Fellow and Special Assistant to the U.S. Secretary of Labor, and as Assistant Dean of the College of Business and Management at the University of Maryland.

Dr. Brown, who teaches leadership at the graduate school of Public Affairs at the University of Maryland, also serves as senior fellow at the Center for Public Policy and Private Enterprise, and at the James MacGregor Burns Academy of Leadership. She has published two books and numerous articles on a range of topics related to leadership.

Her recent projects include working with the leadership of symphony orchestras, urban libraries, manufacturing plants, and public schools. Dr. Brown is author of *The Choice* (Conari, 1995), a book about processes of organizational and personal learning and change, *The Sea Accepts All Rivers and Other Poems* (Miles River Press, 2000), and is among the contributors to *Learning Organizations: Developing Cultures*

for *Tomorrow's Workplace* (Productivity Press, 1995), and an upcoming volume on leadership edited by Peter Vaill.

Several years ago, Dr. Brown served on the faculty team that created the Center's Maryland and National Smart Growth Leadership Programs and has taught in each of those programs over the past several years. She is interested in the broad range of the policy dimensions of Smart Growth, and has particular expertise in leadership processes that enable communities and organizations to move through contentious issues and achieve sustainable results.

John W. Frece

John W. Frece is a former journalist who worked for seven years on the staff of the Governor of Maryland, including six as a policy adviser and spokesman for Maryland's Smart Growth initiative. In addition to raising the visibility of the Smart Growth program in Maryland and throughout the nation, Mr. Frece was instrumental in helping the program receive a \$100,000 prize as a 2000 winner of the annual Innovations in American Government award program sponsored by Harvard University, the Ford Foundation and the Council for Excellence in Government.

He previously worked as a political and government reporter for the *Baltimore Sun* and *United Press International*, for which he covered 17 sessions of the Maryland General Assembly and some or all of the administrations of five Maryland governors.

As the Center's communications director, Mr. Frece is responsible for outreach and press relations, publications and reports, the Center's web page and related external operations. He also serves as an Affiliate Assistant Professor at the University.

He holds a B.A. degree in philosophy from the College of William and Mary in Virginia. He is an Affiliate Assistant Professor at the University of Maryland.

Kathleen Petrone

As the Center's Coordinator, Kathleen Petrone oversees the day-to-day administration of the National Center for Smart Growth and its staff. She holds a B.S. degree in Family Studies from the University of Maryland at College Park.

A member of the National Center for Smart Growth staff for two years, Ms. Petrone is the contract and grant administrator for the School of Architecture, Planning, & Preservation. She is also the program manager for the Center.

Graduate Assistants

Since its inception, the Center has supported 29 graduate assistants, including 10 in the most recent semester.

These graduate students have been assigned to assist individual members of the National Center faculty and staff; to work with the School of Architecture, Planning and Preservation; to assist with the Center's GIS facility; to support the Smart Step Forward walking initiative; to assist with the Center's China Land Policy program, and to assist affiliated faculty in the development of projects financed by the Center's Small Grants research fund.

New Researcher

At the end of 2003, the National Center for Smart Growth and the School of Public Affairs were preparing to interview applicants for a new Smart Growth research position at the Center. The University was seeking a tenured or tenure-track assistant, associate or full professor with teaching and research interests in the Smart Growth field.

The Center and the School of Public Affairs were seeking applications from persons with interdisciplinary expertise in environmental economics and policy, housing and community development, and/or public finance. Candidates were expected to have a record of distinguished scholarship and successful teaching in pertinent fields, and have experience or great familiarity with the making and implementation of policy at the regional, national or international levels.

XIII. CENTER AFFILIATES

More than two dozen University of Maryland faculty members are affiliates of the Center, many of them doing research projects directly related to Smart Growth issues.

Home departments of affiliate faculty include Public Affairs, Agricultural Economics, American Studies, Geography, Landscape Architecture, Engineering, Architecture, and Urban Studies.

At the end of 2003, the listing of the Center Affiliates included:

- Anna Alberini, Assistant Professor, Agricultural and Resource Economics
- 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 Affairs
- Shenglin Chang, Professor, Department of Natural Resource Sciences and Landscape Architecture, College of Agriculture and Natural Resources
- Kelly J. Clifton, Assistant Professor, Civil and Environmental Engineering
- James R. Cohen, Lecturer and Director of Graduate Studies, Urban Studies and Planning
- Catherine Dibble, Assistant Professor, Geography
- Malise Dick, Adjunct Professor, Business
- Charles G. Field, Senior Research Fellow, School of Public Affairs
- Christopher H. Foreman, Professor and Director of Social Policy Program, School of Public Affairs

- 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
- Marie Howland, Director and Professor, Urban Studies and Planning
- Roger K. Lewis, Professor, School of Architecture, Planning and Preservation
- Loretta M. Lynch, Associate Professor, Agricultural and Resource Economics
- Glenn E. Moglen, Associate Professor, Civil and Environmental Engineering
- Robert H. Nelson, Professor, School of Public Affairs
- Matthias Ruth, Professor, School of Public Affairs
- Qing Shen, Associate Professor, Urban Studies and Planning
- Mary Corbin Sies, Associate Professor, American Studies
- 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