



INFOTEXT

Information Technology Division of the American Planning Association
Fall 2006 • Issue 87

Interdisciplinary Planning Technology

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Image courtesy of the City of Portland and Public Media Works



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A Message from the Chair

Kenneth R. Snyder



**Ken Snyder, Chair of IT
Division**

The arid West has become the destination point of many businesses and individuals seeking sunny skies and a full range of outdoor amenities. In some places, such as Colorado, the population has more than tripled. Air pollution, traffic congestion, water worries, and loss of habitat and open space are just a few of the multiple signs of stress we are experiencing at the local level. Since we can't plan for people to just go away, we need to strategically plan for where they will live, shop, work, and commute.

The good news is that, in many communities, sophisticated discussions about density, transit, sustainable resource use and open space are commonplace, largely due to planners recognizing the interconnectedness of traditionally separate disciplines. We no longer talk about land use without a discussion about transportation, air quality, and health issues. And we no longer consider implementing a planning project that does not include efforts to engage and inform the public—drawing on several other disciplines such as the social sciences, information technology, art, and other forms of media.

As we take on a more integrated approach to planning, we are better able to map out the complex relationships and interdependencies that must be addressed in order to make well informed decisions and fully understand potential impacts. Since data and information from various disciplines are now being integrated into planning decisions, the range of tools that are available to planners has increased in kind. Planners are now able to apply existing tools from other disciplines in new ways, and vice versa. The interoperability of data and tools across disciplines has improved dramatically in the past few years, making it possible for planners to take a

more systems approach to their work. For example, in my own work with the Orton Family Foundation, funding from The David and Lucile Packard Foundation is supporting a project to “bridge the divide” between scientific information and planning, seeking new tools and technique to more effectively integrate ecosystem management and community planning.

In this issue of InfoTEXT we highlight creative uses of technologies that demonstrate this kind of interdisciplinary approach to planning. You will see how design, multi-media data collection, GIS, education, remote sensing and more have informed and been informed by the planning field.

For those of us who have chosen planning as our life's work, I believe it is our responsibility to make the extra effort to reach out beyond our traditional approaches and take advantage of the new and exciting offerings in technical tools to develop creative and cross disciplinary approaches to engaging and informing ourselves and the public.

*Ken Snyder
Chair, Information Technology Division of
the American Planning Association*

Call for Abstract Submissions for the Winter 2006-2007 InfoTEXT Newsletter

Theme: Open Source Technology

Open Source technology is changing the way we think about technology. Procedures that might once have been difficult to master, like building a website or posting a map for online commentary, are now user-friendly and intuitive. Best of all, open source technologies are free. However, since open source software is often under development, there are risks involved in its use.

We are looking for case studies that demonstrate how planners and/or communities have used open source technology in a planning context; what worked well and what didn't?

For example, projects that used open source technology for:

- ☞ Creating a website
- ☞ Doing GIS analysis
- ☞ Creating a public participation forum

In particular we are soliciting articles and sidebars that focus on:

- ☞ Case studies directly from communities
- ☞ Lessons learned (both positive and negative) regarding the use of open source technology in planning

Please submit your abstract ideas to: Jocelyn Hittle, jhittle@orton.org by **November 1st**. The newsletter will be published in January.

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Upcoming Conferences of Interest

Conferences: October through March

American Society of Landscape Architects Annual Meeting and EXPO and International Federation of Landscape Architects World Congress

October 6-10, 2006

Minneapolis, Minnesota

<http://www.asla.org/meetings/am2006/minneapolis.html>

PlaceMatters06: A Creative Planning Collaborative for Sustainable Communities

October 19-21, 2006

Denver, Colorado

<http://www.placematters.org>

Rail~Volution: Building Livable Communities with Transit

November 5-8, 2006

Chicago, Illinois

<http://www.railvolution.com>

Alliance for Regional Stewardship Fall Forum: Building Strong Regions from the Top Down and the Bottom Up

November 15-17, 2006

Fort Lauderdale, Florida

<http://www.regionalstewardship.org/stewardshipforum.html>

New Partners for Smart Growth

February 8-10, 2007

Los Angeles, California

<http://www.newpartners.org/>

Don't forget to stop by the IT Division booth at the [APA National Conference](#), April 14-18, 2006 in Philadelphia.

Please email jhittle@orton.org if you would like to include a listing of a relevant conference in future issues of InfoTEXT.

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The Vision Vessel: A Fresh Approach to Public Outreach

By Elizabeth Moreno, Public Media Works and Amanda Rhoades, visionPDX, City of Portland, Oregon

PUBLIC MEDIA WORKS.

Public Media Works is a not-for-profit organization, a team of media professionals, and a creative hub for new ideas.

Public Media Works' mission is to energize democracy through the production and distribution of public interest videos and new media. Their documentary stories, civic art projects and screening events provide underrepresented voices the opportunity to speak and be heard, while inspiring audiences to become deeply engaged in their communities.

www.publicmediaworks.org

The Vision Vessel is a novel civic engagement tool used by the City of Portland, Oregon to reach people who normally would be unlikely to participate in government. The tool brought together resources from the architecture, design, public art and online technology fields, successfully sparking the imagination of hundreds of Portlanders and helping to publicize the City of Portland's community visioning process, visionPDX.

Portland on the Rise

Currently home to over half a million people, Portland, Oregon is expected to grow dramatically, with estimates of one million additional residents in the region over the next 20 years. Many of

those moving to Portland are young and educated, members of Richard Florida's "creative class;" others are immigrants and refugees from Latin America, Vietnam, Eastern Europe and Africa. Still others seek out Portland for its international reputation as a place of new ideas, tolerance, open government and a high quality of life.

visionPDX

Growth and the changes it will bring prompted newly-elected Mayor Tom Potter to call for a community-wide visioning process. Mayor Potter, moved by the idea of community governance, brought to life [visionPDX](#), a two-year process to enable people across the city to develop a shared vision for Portland's future.

The goal of authentic community ownership over visionPDX has been its striking feature, and also its greatest challenge. Portland is known for high levels of civic involvement. The community climate has two important consequences for visionPDX: a) high standards in the public for real engagement in the process;

and b) a weariness with the common ways that government engages residents, such as public meetings, mail surveys, and testimony sessions.

In particular, there is a belief among some that the "usual suspects" often end up shaping policy because they are fluent in the common ways of accessing government. visionPDX set out to

reach traditionally underrepresented populations through a community grants process, which encouraged diverse community groups to develop creative tools to engage their distinct constituencies in visionPDX.



Graphic of the interior of the Vision Vessel by Brad Denby and Ryan Lingard

Vision Vessel

One of the most innovative strategies that emerged from this

process was the Vision Vessel. The brainchild of the three co-founders of [Public Media Works](#), the Vision Vessel is a mobile, multi-media recording booth designed to capture the attention, imagination and feedback of the city's young creatives, artists, and working professionals.

Sleek and eye-catching in its design, the Vision Vessel stands a full seven feet tall and is surrounded by a coiled, translucent "scrim." Inside, a slim triangular tower houses a hidden camera, a microphone, a Mac Mini computer, and a car battery (to power the technology and add some needed ballast). A keyboard protrudes from below a flat screen, which flashes an enticing "start here" icon.

A fast-paced video introducing the project sets the stage, followed by a series of images of everyday Portlanders asking open-ended questions about the city's future. Responses can be entered into the computer using the keyboard, and/or recorded using the microphone. All data is stored in a database created for the project and uploaded daily onto the project's website,

www.visionvessel.org.

This project exceeded expectations by igniting the imaginations not only of the target population, but of the city at large. The local press found the project particularly novel, featuring it in major dailies and weeklies, as well a number of reputable local blogs. In the words of Zach Dundas, who wrote a piece for the online edition of [Metropolis Magazine \(8/3/2006\)](#), the Vision Vessel “is designed to rocket democratic discourse into the podcasting age by fusing racy design and dirt-cheap technology.”

Considerations and Lessons Learned

As noted by Dundas, the Vision Vessel is a high-technology, low-budget project. As such, some technical glitches and general project challenges were to be expected. The most persistent problems involved the computer hardware inside the column of the Vessel. After donated, refurbished hardware proved unreliable, the project team opted to purchase a new Mac Mini, along with a new keyboard and a touchpad. This increased the cost of the project by a few hundred dollars, but ensured that the video and audio content would play and record as intended. However, even the Mac Mini eventually proved problematic, overheating and crashing whenever the Vision Vessel was in the sun or a warm corner for too long.

As is evident by the technological issues, this project was constrained by the size of its budget (\$11,000 in City funds). To compensate, around \$50,000 in-kind professional services were donated to the project. These donated services included marketing and publicity, photography, video production and post-

production, website design, website programming, grant-writing, and the design and construction of the Vessel itself. To replicate this project, these costs would need to be included in the initial budget.

A future project could also benefit from more strategic site selection, as a significant amount of staff time was spent moving the Vision Vessel to and from each of the 20 plus locations it visited between the months of May and August 2006. Sites yielding the highest responses tended to be social gatherings, parties, and “scenes,” where people had plenty of time to mingle and discover the Vision Vessel. Overall, the project generated over 260 direct responses, most of which

were thoughtful and seriously addressed the city’s planning questions.

The Future of the Vision Vessel

With better, more reliable technology, fewer locations to visit, and a higher traffic flow in these locations, the Vision Vessel could generate significantly larger volumes of data. As is, it has proved a highly effective tool for sparking public interest in visionPDX.

As a result of its success, a number of groups have approached Public Media Works about modifying the interface to allow the Vision Vessel to collect data for their own planning, visioning, or input-gathering efforts. Public Media Works is currently exploring those possibilities and actively considering ways to improve upon key aspects of the project.



The Vision Vessel in use.






What is visionPDX?

“The 45+ member visionPDX Committee (a varied group of civic leaders appointed by Mayor Tom Potter) will gather Portlanders’ ideas, thoughts and feedback and distill them into a vision that maps Portland’s future. We’ll identify our top priorities and, with your participation, we’ll select a few truly visionary and unique ideas that we “Portlanders” want to focus on.

Really, visionPDX is a major exercise that asks: As a community, who do we want to be?”

www.visionPDX.org

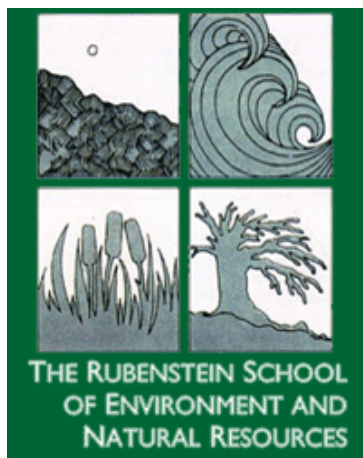
Your input on visionPDX or the Vision Vessel is welcome and can be submitted through:

-  www.visionvessel.org,
-  www.visionPDX.org, or
-  directly to project organizers.

Advances in the Use of High Resolution Imagery in a Land Use Context

By Austin Troy and Weiqi Zhou

University of Vermont, Rubenstein School of Natural Resources



For more information on the Rubenstein School of Environment and Natural Resources:
www.uvm.edu/envnr/

State and local planning agencies are increasingly acquiring high resolution, multi-spectral aerial or satellite imagery. While these images make a good backdrop and are interesting to look at, to be of real use in planning something needs to be done with them. Specifically, images need to be processed in order to be used in a Geographic Information System (GIS), allowing for queries, searches, overlay analysis, or database creation. In this article we discuss a new approach that allows planners to get the most out of high resolution imagery.

In this article, we show how new technologies can be used to automate the process of “extracting” information from imagery and, based on that, map out a city’s resources and liabilities at a very fine scale. We show how this approach was used to automate the process of mapping: 1) building footprints; 2) roads, sidewalks, parking lots and other impervious surfaces; 3) vegetation, down to the level of individual trees and lawns, and 4) “multi-layer phenomena,” which are, for instance, areas where trees overhang roads. We also show how this information can then be summarized at a number of levels, from a planning district on down to an individual parcel.

This novel approach is being undertaken as part of the Baltimore Ecosystem Study (BES; www.beslter.org), one of the National Science Foundations two urban Long Term Ecological Research (LTER) projects. BES seeks to better understand the metropolitan Baltimore region as an integrated ecological and socio-economic system by bringing together researchers from diverse disciplines. It supports active outreach and research collaboration with community groups, educational institutions, and government agencies and works to disseminate its research results to decision makers. Our study area for this imagery research is the

Gwynns Falls Watershed, a 17,150 acre area in Baltimore City and Baltimore County, MD which drains directly into the Chesapeake Bay. The Gwynns Falls was chosen as a watershed for intensive study by BES because it includes a diverse gradient of land uses from dense urban to relatively rural and has been the subject of considerable research and data collection.

The Technical Details

To address why extracting information from imagery is so difficult and why this new approach is so valuable, a little remote sensing primer is needed. To summarize an entire textbook in a few sentences, a digital image is made up of vast numbers of tiny squares called “pixels.” Multi-spectral satellite or aerial imagery typically records reflected light for each pixel in different parts of the light spectrum. Pixels are then classified based on the similarity of their reflectance values to those of known land use types.



Figure 1. Raw imagery overlaid with parcel boundaries

This approach does not work for high resolution imagery. At a fine scale a single object can be composed of a large number of pixels with diverse reflectance characteristics. For instance, a tree may be composed of dozens of pixels displaying a wide range of reflectance characteristics due to the effects of the tree’s irregular surface on light and shading. A second problem is that two objects with very different functions may have the same reflectance—a building and a street, for example.

Object oriented (OO) classification offers an alternative approach for high resolution image classification. Operating on principals similar to those that govern how the human mind perceives patterns, the OO system segments groups of pixels into “image objects,” intended to represent real world objects. These objects

are then classified based on user defined rules. For this project we used the leading OO software package, eCognition, from Definiens Imaging. (www.definiens.com). The first step in eCognition is segmentation of the image into polygon objects. The program defines objects by creating a polygon around groups of pixels with relatively similar reflectance profiles. After the user has obtained acceptable image objects, they can be classified, based not just on their reflectance, but also on their spatial characteristics, such as shape metrics (area, compactness, edge to area ratio, sinuosity, etc.), as well as contextual metrics that describe proximity or adjacency to other object types. Further, additional GIS layers can be integrated, allowing for inclusion of overlay rules that would normally be found only in GIS software.



Figure 2. Level 2 segmentation

For instance, two polygons might have the reflectance characteristics of grass. One might be small and rectangular, be in a residential zoning district, and be very close to an object identified as a house and another object identified as a street. Based on that information, we could classify the object as a residential lawn. Another object may have identical reflectance, but be very large (say, ten acres), far from structures, further from a road, and in an agricultural zoning district. We might then call that either pasture or hayfield.

In this process “knowledge bases,” or databases of classification rules, are created. As more and more rules are found that increase classification accuracy, they can simply be added to the knowledge base, allowing users to replicate these results in subsequent efforts--when new imagery becomes available, for instance.

The Road to Data in Baltimore

We acquired high resolution (~.6 meter), 3 band color-infra red imagery for the Gwynns Falls watershed from Emerge, an aerial imagery provider, for 1999 and classified it using eCognition. Our two base inputs were raw imagery and parcel boundaries (Figure 1). First we segmented these into small but homogeneous objects using what we called a “first level” segmentation. Many of these

polygons were smaller than the objects (e.g., a house) that they were part of. We then classified Level 1 objects into five land cover classes (trees, grass, building, pavement, bare soil) and, based on that, re-segmented our objects so that small, adjacent objects of the same type were merged into larger, more meaningful objects (Figure 2).

LiDAR (**L**ight **D**etection **A**nd **R**anging) data, a high resolution terrain model that can be used to obtain the height of buildings and tree canopies, was used to improve the classification by helping to differentiate between tree and herbaceous vegetation. The improved classifications were then applied to the merged objects and proportions of each cover type were summarized by parcel. Based on a visual comparison with the reference imager our overall classification accuracy was 92.3%, which is extremely high relative to typical coarse imagery classifiers, which frequently are between 70 and 80% accuracy.

Some additional analyses were conducted to derive vegetation characteristics in these properties. First, we measured the “greenness” of each lawn polygon, based on reflectance properties, and assigned that as an attribute (Figure 3, next page).

(Continued on page 8)

Acknowledgements

This project is part of the Baltimore Ecosystem Study (BES), a Long-Term Ecological Research (LTER) project of the National Science Foundation. The purpose of BES is to help better understand long term ecological and social processes in urban ecosystems, how they interact, and how they are dependent. Funding for this specific research came from a Grant from the National Science Foundation's Biocomplexity and the Environment program (award number 0508054), led by Dr. Steward Pickett, and from the Northern Research Station of the USDA Forest Service.

...Continued from page 7

This could be extremely useful in identifying potential source areas for non-point source nutrients, such as lawn fertilizers, which are generally associated with much greener lawns. Second, we used LiDAR to measure the height of tree canopies and assigned that as an attribute to each tree polygon (Figure 4). This information could help urban foresters monitor not just canopy coverage, but height and possibly age classes across the urban landscape.

Sharing the Wealth

Once imagery is classified and land cover is summarized in this way, the applications are limitless. One of the purposes that BES researchers will be using this data for is to better understand nutrient dynamics in an urbanized watershed, a critical issue for this area, since the Chesapeake is highly endangered by nitrogen and phosphorus loads. By correlating land cover metrics (especially those like lawn greenness and imperviousness) against nutrient measurements in streams, we can help better understand where nonpoint source pollutants are coming from, how they are transported and what needs to be done to curb them. We will also be using this data to study social phenomena, like how property values are affected by green space and tree cover, and even tree height, at multiple scales. Other applications include looking at carbon storage in urban trees, a critical offset to global greenhouse gases, which can be relatively accurately done since we can estimate tree size.

Beyond these research applications, development of such databases can be an indispensable tool for planners and agency personnel. Not only can it help them generate important data layers like building footprints and impervious cover, but it can also be used to generate attributes for parcel level databases, and map features in city owned land at a fine scale. It is particularly useful for helping planners manage a city's green infrastructure, including its parks, street trees, riparian areas, and institutional lands. By mapping out vegetation at the level of individual trees, planners can assess whether its environmental goals are being met and what strategies to pursue to meet those goals.

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Figure 3. Classification results with lawn greenness by parcel



Figure 4. Classification results with tree height by parcel

Featured Conference: PLACEMATTERS06

PLACEMATTERS, an initiative of the [Orton Family Foundation](#), is a living laboratory where practitioners from around the country come together to learn, share, inspire and seed innovation in place, collectively elevating the art and science of planning for vibrant and sustainable communities.

On October 19-21, PLACEMATTERS06

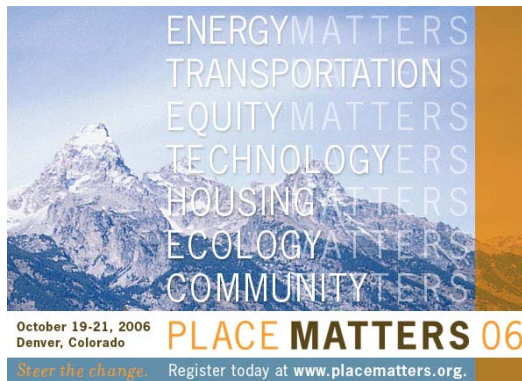
will touch down in Denver, Colorado, heart of the Rocky Mountain region, bringing a variety of the best tools, processes and people to bear on some of the most critical land use challenges of our times. A key feature of PLACEMATTERS is its place-based approach to a national convening. Although presenters and participants come from all over the country, particular attention is being given to projects and issues that affect the Rocky Mountain Region.

PLACEMATTERS06 builds on an eight year legacy of convenings around tools for community design, planning and decision-making. At past conferences (most recently known as the [Community Planning Collaborative](#)), tool developers, planners and civic leaders have convened to share ideas, showcase technologies and methods and improve the way communities make decisions about their future.

This year's PLACEMATTERS06 conference includes many of the same benefits as the Community Planning Collaborative, but has expanded to include additional topics and speakers. For instance, keynote presentations will be given by Steven Berlin Johnson, author of *Emergence: The Connected Lives of*

Ants, Brains, Cities and Software and a leading voice on the future of technology in society; Pam Houston, Western novelist and author of *Cowboys Are My Weakness*, and Denver Mayor John Hickenlooper.

Although one day of the conference will focus on sessions and panels that address regional and national planning challenges, the second day and a half of the conference will



be in "open space" format, allowing attendees to drive the agenda and form discussion groups on topics that they identify as of interest. This format creates an ideal setting for collaboration and discussion among attendees and has proven very effective at creating partnerships and networks, as well as forming creative solutions to challenges.

In addition, the conference will make use of eParticipation technologies throughout the convening to gather feedback, capture ideas, and package an agenda for further action.

Some of this year's sessions include:

- ☞ eParticipation technologies for enhanced civic engagement
- ☞ Transportation solutions for a growing West
- ☞ Tackling the big challenges of small town planning
- ☞ Tools and methods for integrating ecological and community planning

Visit www.placematters.org to explore the full program and list of speakers and register.

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For full details:
www.placematters.org

Mapping the Air: Use of Land Use Regression in Air Quality Monitoring

By Sarah Henderson

School of Occupational & Environmental Hygiene
University of British Columbia, Vancouver, B.C.

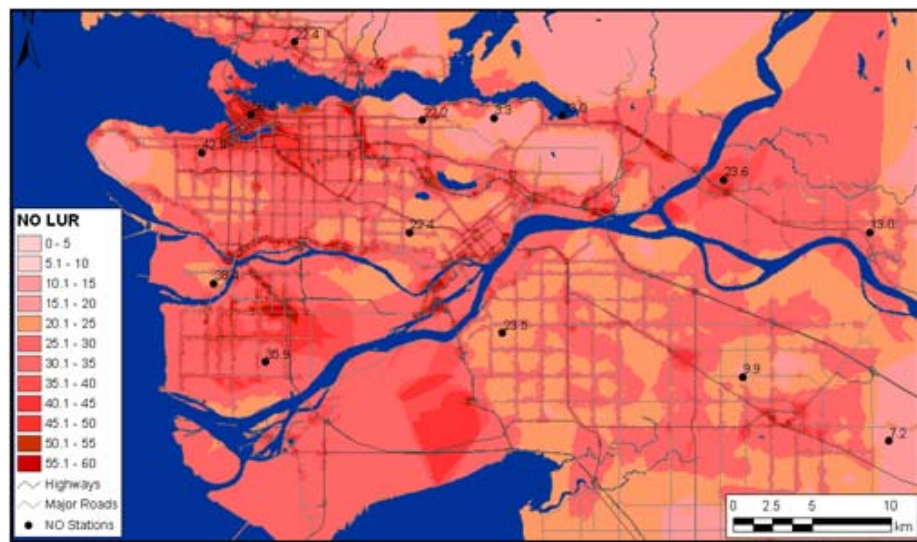
For more information, contact Sarah Henderson at sarah.henderson@ubc.ca



Or visit the School of Occupational & Environmental Hygiene's website: www.soeh.ubc.ca

Although air pollution is often considered in transportation planning and other planning decisions, the level of information on air quality available to planners is often very general. Some cities have dense networks of continuous monitors that measure multiple pollutants, but most collect less complete data on a limited number of compounds. The influence of sources like major roads and industrial complexes often goes uncharacterized, and the localized impacts that are of most concern to planners

poral scales can be a very valuable tool. Land use regression (LUR) is a relatively simple way to generate maps that predict ambient air pollution concentrations at high spatial resolution. Its methods are straightforward and elegant, and can significantly reduce the amount of time and resources required to model air quality in a community. The first step is to measure pollutants of interest at several (40+) locations that are expected to represent the full range of pollutant concentrations. The second step is to de-



Land Use Regression surface for nitrogen oxide (NO) concentrations across Vancouver, Canada

and the general public are challenging to detect. Despite this limitation, data have consistently shown that specific air pollutants have small but significant effects on short- and long-term human health.

To better explore the relationship between local air quality and its health effects, researchers need more accurate estimates of personal exposure to pollutants. Individual exposure is largely dictated by how a person moves through space and time, so anything that improves estimates on spatial and tem-

scribe each sampling site and its surroundings within a GIS framework. Variables that describe traffic intensity, population density, and land use are typically generated. The third step is to use these spatial variables in a statistical model that predicts the measured pollutant concentrations. Finally, GIS is used to render the models as maps.

While similar maps can be created with complicated pollution dispersion models, LUR is unique in its ability to accept flexible inputs. For example, some cities rigorously measure

IT Division Sessions for the 2007 APA National Conference

and model traffic volumes for transportation planning, while others do not. Traffic volume data should be used for LUR whenever possible, but street networks can provide a good proxy for traffic impact in their absence. As another example, the role of meteorology in pollutant fate and transport varies from place to place. In their simplest form, LUR variables are collected with circular buffers around the sampling sites, but more complex analyses have experimented with air drainage polygons instead. While the underlying method remains constant among applications, new and novel techniques for generating variables to predict pollutant concentration are constantly being explored.

Over the past ten years a number of LUR studies have been conducted throughout Europe and North America with consistently good results that have direct implications for planning. Estimates from LUR models are now being used in many epidemiological analyses, and planners and policy-makers are beginning to focus on the public health implications of air pollution on smaller spatial scales. A growing body of evidence suggests that people, especially those who are most likely to be affected by poor air quality (e.g. children and the elderly), should be distanced from pollution sources whenever possible. In September of 2003, the State of California set a North American precedent by passing a bill that requires all new schools to be built at least 1/4 mile from any major road. An additional benefit of LUR is its relative ease and low cost, compared to other forms of pollution modeling. An LUR model could be within the budget and project timelines of many communities. As the simplicity, flexibility, and power of LUR gain global recognition it is likely that its application will serve to inform more planning and regulatory decisions like the California law, and will see widespread application in communities of all sizes.

Thank you to all who submitted a proposal for the APA IT Division by-rights sessions at the 2007 National Conference. We hope you will attend the selected sessions (below) in 2007.

Wireless Communications: Towers and Land Use Controls – What Works and What Doesn't

A pragmatic clinic on code and policy revision and development to manage the wireless communications land use, this session will focus on delivering 'How To' information to the people who need it. Many localities are revising their land use controls -- but few understand the wireless communications land use well enough. This session will introduce the information and tools planners need to strike a healthy balance between controlling the wireless communications land use, and fostering the best possible wireless services in the community.

Applied Planning- Enforcing Ordinances, Implementing Conditions & Monitoring Mitigation

Planners and local legislators work hard to develop conditions of approval and requirements within development agreements to improve the built environment and add cohesion to regional development, but who ensures that these conditions are implemented? Federal, state, regional and local environmental laws include provisions for the utilization of consistent and effective mitigation monitoring efforts but how often are measures actually implemented? With a variety of fiscal challenges facing jurisdictions, how many local governments actually have adequate staff and resources to manage these programs?

This presentation will provide an overview of the challenges local governments have in tracking development compliance with conditions and requirements, including the results of a 2005 survey focused on monitoring programs conducted in more than 300 jurisdictions throughout California.

Discussion will include real and potential problems followed by recommendations of how to improve implementation programs by developing cost effective strategies utilizing interactive electronic devices, database management, and adaptive management.

CA Legislation Passed to Help Wireless Infrastructure Siting

CA SB 1627 was signed into law last week -- legislation which will help California manage wireless infrastructure siting issues better, encourage rapid and effective deployment of new technologies and services, and facilitate maximum utility from existing wireless infrastructures.

PCIA (www.pcia.com) helped support this legislation which was sponsored through Senator Kehoe's office ~ the PCIA's letter requesting signature of the bill can be found at http://www.pcia.com/advocacy/adv_docs/Signatureletter1627.pdf

Language of the legislation itself can be found at: http://www.leginfo.ca.gov/pub/bill/sen/sb_1601-1650/sb_1627_bill_20060825_enroll.ed.pdf

Online Learning for Planners

Using Online Courses for Continuing Education and Interdisciplinary Exploration

By Christian Peralta, Associate Editor, Planetizen

“...By using these tools to gain additional knowledge not traditionally emphasized in a planning education, a planner can be better prepared to respond to some of the challenges facing modern day cities.”

Staying current with the latest trends in the field can be a challenge for many professionals. While some organizations provide regular training for their staff, many workers must find time outside of their busy work schedule and personal obligations for professional development. And then there's the cost. How many of us have grumbled at the price tag of a one-day continuing education seminar?

Fortunately for professionals that don't have the time or money for traditional continuing education programs, there are now several online programs that provide a more convenient and lower cost alternative.

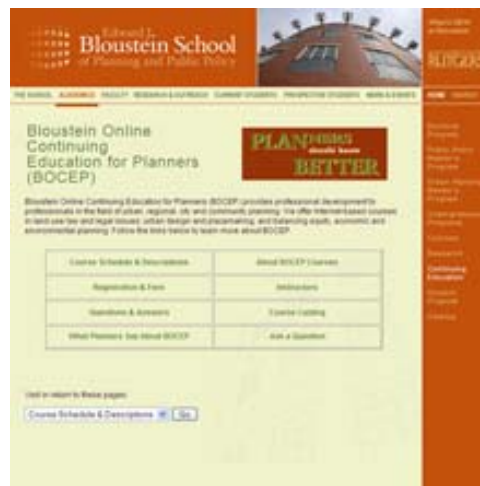
Offered by a number of well-known universities and companies, the courses cover a range of topics from the basics of the planning profession to advanced land use and environmental issues.

Aside from the obvious benefit of providing training, online courses allow participants to tailor learning to their schedule. "Students can log-on and review materials at their convenience - before work, during their lunch break, or after the kids have gone to bed," remarked Chris Steins, Co-Founder and Editor of Planetizen, a leading news and information website that began offering online courses in 2004.

Online courses also have great potential to help create interdisciplinary bridges within the planning field. Market economics, writing, and environmental justice are just some of the subjects that planners can delve into deeper using the online courses available on the

web. By using these tools to gain additional knowledge not traditionally emphasized in a planning education, a planner can be better prepared to respond to some of the challenges facing modern day cities.

The increasing number of online course offerings is evidence of an already burgeoning trend. With the growing familiarity with the Web and the spread of high-speed Internet connections, more and more people are going online to learn. In 2004 alone, more than 2.3 million people took some kind of online course, according to a recent survey by The Sloan Consortium, an online education group.



The Bloustein Online Continuing Education Program at Rutgers University offers 18 online courses in subjects including planning law.

Most web based courses take advantage of learning management systems (LMS), a type of software that facilitates

interaction between the course instructor and the students. Course materials are easily viewable from anywhere using an Internet browser, and include readings along with links to related materials. Some programs integrate audio or video clips to enrich the learning experience.

To facilitate the interaction between course participants and the instruction, most online courses take advantage of online forums and discussion boards, along with regular email, which have the advantage of allowing dialogues to happen without everyone needing to be online at the same time.

Among the universities offering urban planning courses online is the Bloustein School of Planning and Public Policy at Rutgers University. Since its launch in April

2005, the Bloustein Online Continuing Education Program (BOCEP) has run 18 courses in a wide variety of subjects, including planning law and urban design. The courses, which are taught by Bloustein instructors, last for about 4½ weeks and cost about \$250. Discounts are available for APA members and employees of non-profit organizations, among others.

Leo Vazquez, director of the Bloustein online program and an instructor at the school, commented that the quality of online courses can be just as good as in a face-to-face environment, provided

students are committed to the process. "If you're the type of person who goes to training sessions to take a vacation from work, you probably won't enjoy the online format as much," says Vazquez. "However, one of the benefits of an online class that runs for a few weeks, such as BOCEP classes, is that you have time to absorb and explore new ideas, without having to commit to sitting in a room for several days."

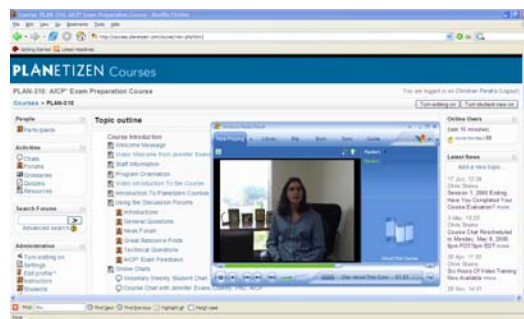
Ohio State University's Planning Education at a Distance (PED) program provides the opportunity to earn a graduate certificate in facilities planning and management for professionals already working in the field. In addition to the certificate, the PED program offers continuing education courses covering issues such as smart growth and zoning and landscape laws. Registration fees for courses average around \$55.

The Massachusetts Institute of Technology (MIT) also offers a wide array of undergraduate and graduate level courses in urban studies and planning through its

OpenCourseWare website. In contrast to the Bloustein School and OSU's PED program, MIT only provides access to course materials, and does not provide access to the instructor or interaction with other students other than through a seldom used discussion board.

However, the materials are invaluable for those who wish to follow a self-instruction program. Best of all, the courses are free to the public.

In addition to universities, a few other organizations offer planning related courses online. Planetizen, building on the popularity of its



Planetizen offers courses for planners on subjects including transit-oriented development and a popular AICP preparatory course

initial AICP exam preparation course, launched in 2004, has recently added an array of new online courses for planners. Prepared and led by professional and/or academic experts, the new courses cover topics including transit-oriented development, historic preservation, economics for planners, and technology for planners. Each course costs \$99, and allows participants to access materials for a six-month term.

The Lincoln Institute for Land Use Policy also offers online courses and distance learning opportunities as a supplement to its regular continuing education program. Enrollment is free for many of the courses, which include a planning and land use fundamentals program for planning commissioners and zoning board members.

For those looking to learn to use Geographic Information Systems (GIS), software maker ESRI provides instructor-led online courses, along with a series of instructional audio podcasts.

"... one of the benefits of an online class that runs for a few weeks... is that you have time to absorb and explore new ideas, without having to commit to sitting in a room for several days."

To Visit Resources Mentioned in this Article:

Bloustein School of Planning and Public Policy Online Continuing Education Program <http://policy.rutgers.edu/bocep>

Planning Education at a Distance (PED) - Ohio State University <http://knowlton.osu.edu/ped>

MIT OpenCourseWare - Urban Studies and Planning <http://ocw.mit.edu/OcwWeb/Urban-Studies-and-Planning>

Planetizen Courses www.planetizen.com/courses/

Lincoln Institute for Land Use Policy www.lincolninst.edu

ESRI Virtual Campus <http://campus.esri.com>

Accepting Nominations for the 2007 APA IT Division Awards

The Information Technology Division of the American Planning Association has created five awards that will be presented at the 2007 National APA Conference in Philadelphia. The deadline to submit an awards nomination is **January 15, 2007**.

Categories

Category 1: Best Use of Technology to Plan for Natural Disaster Prevention or Recovery:

This category recognizes an organization for the use of technology for disaster prevention or recovery before a disaster occurs. Examples may include hurricanes, tornadoes, earthquakes, or wildfires.

Category 2: Best Use of Technology for Planning Analysis:

This category recognizes an organization or individual for the creative use of technology to carry out in-depth planning analysis and planning forecasting methods.

Category 3: Best Use of Technology for Public Participation:

This category recognizes an organization for the best use of technology to enhance public involvement to enhance public involvement and participation in planning and decision making processes.

Category 4: Best Use of Technology for a University Urban and Regional Planning Program:

This category recognizes an accredited university planning program for the most effective use of teaching with technology in preparing future planners for professional

work. This can include the work of a single class or the use of technology to benefit all students in the program.

Category 5: Best Use of Technology to Improve a Plan or Planning Process:

This category recognizes an organization for the creative use of technology in improving planning processes. Examples may include technology in subdivision approval, urban design, or comprehensive planning.

To receive an application please contact cowley.11@osu.edu

A summary of the award winners will be published in the Information Technology

Division quarterly newsletter and the winners will be presented with their awards at the National American Planning Association Conference in Philadelphia.



IT Vice-Chair Jennifer Cowley and Chair Ken Snyder presenting a 2006 Award to Don Kostelec from the Ada County Highway District and Andy Mortensen from the Transpo Group

Eligibility

1. All projects must have been completed during 2005 or 2006.
2. Only electronic copies of applications and attachments will be accepted. The application and attachments should be saved in a Microsoft Word or Adobe Acrobat format.
3. The deadline for receipt of the papers is January 15, 2007. No late applications will be accepted. Submissions should be submitted electronically to Cowley.11@osu.edu

Selection Criteria

A subcommittee of planning practitioners

InfoTEXT is Online

and planning faculty will read all applications using blind review. The applications will be judged on following evaluation criteria:

1. Innovation: Introduction of an original concept or refinement of an existing technique or procedure;
2. Quality: Excellence of thought, analysis, graphics, and writing;
3. Transferability: Applicability to other areas or projects;
4. Implementation: Effectiveness of the project as evidenced by activity after completion;
5. Comprehensiveness: Thoroughness of the project or program.

Questions regarding this competition should be directed to: Jennifer Evans-Cowley, City and Regional Planning, The Ohio State University (614) 247-7479 or cowley.11@osu.edu.

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Milton Ospina, IT Division Communications Chair, and former IT Division Chair Mike Gritz at the IT Division booth in San Antonio.

InfoTEXT is now available online to APA IT Division members. Members should have received an email containing this issue's hyperlinked table of contents to view the current issue online.

If you would like to receive InfoTEXT electronically and are an APA IT Member, please contact Jocelyn Hittle at jhittle@orton.org.

Selected past InfoTEXT issues are available on the IT Division website: www.planning.org/infotech.

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InfoTEXT

The Information Technology Division is charting the new technologies for the American Planning Association. Planners everywhere need to understand the use and planning implications of new systems: computer simulation, GIS, telecommunications, and computer-based information resources. www.planning.org/infotech

APA's **InfoTEXT** is the Division's newsletter, bringing you current information that is useful for making decisions on how to use the new technologies.

If you are presently a member of APA, it costs only \$25 to join the Division; students \$10; non-members \$40.

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You may also join at www.planning.org/joinapa

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