



**About The Environmental Simulation Center:**

The Environmental Simulation Center (ESC) was established at the New School for Social Research in 1991. Since 1997, the ESC has been an independent not-for-profit organization practicing planning and urban design. The mission of the ESC is to improve the livability of communities through the application of information technology to the community planning, design and development processes, thereby extending capabilities of decision-makers and citizens.

The ESC's approach recognizes that our cities and towns are complex, constantly changing environments, which have resulted in planning and design techniques that are more reactive than proactive. The ESC believes that new technologies are allowing planners and decision-makers to perform their jobs in ways that were never before possible.

# LINKING PEOPLE TO PLACE: THE HUMAN DEVELOPMENT-OVERLAY DISTRICT

By Michael Kwartler, *The Environmental Simulation Center*

Cities and neighborhoods are increasingly becoming the focus of large capital investments in catalytic projects, often through public-private collaborations involving universities, hospitals and health facilities, sports facilities, transit and transit centers, business centers, and large-scale housing developments. Typically, these catalytic projects either require or follow changes in land use policy, such as changing zoning from industrial to residential mixed use. These transitioning neighborhoods are also increasingly influenced by organic change caused by demographics changes, immigration, and gentrification. These are "Shifting Sands Communities," wherein a complex set of forces may combine to generate both intended and unintended consequences.

In almost every situation, there exist low-to moderate-income residents and households, small businesses, and community organizations and institutions that will be deeply affected by these development projects, new policies and population changes. In fact, it is often claimed that the purpose of high-impact developments is to be a catalyst for community change at all levels, based on the assumption that a rising tide lifts all boats. "Shifting Sands Communities" raise issues of social equity and economic justice and provide a diverse set of demographic, market, and land use challenges in managing a balanced and consensually agreed

upon development agenda of *people and place* and *people in place*.

**Human Development Overlay District (HD-OD)**

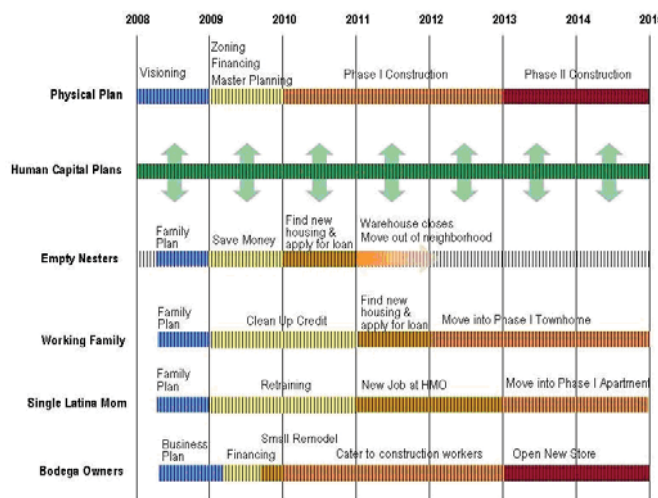
To help Shifting Sands Communities address some of their challenges, the Environmental Simulation Center (ESC) received funding from the Ford Foundation to develop the HD-OD™ (Human Development Overlay District) project. The HD-OD project is intended to harness emerging information technologies to link social

service infrastructure to physical infrastructure and planning processes. The goal is to enable human, social, economic development, and public health agencies to provide assistance to residents and businesses so that they can embrace the physical changes occurring in

their communities as opportunities.

**Integration of Human and Physical Dimensions**

Four pilot communities are participating in the HD-OD: Chinatown in Boston, Hollywood in Los Angeles, Frogtown and Rondo Neighborhoods in St. Paul, and Astoria, Oregon. Representatives of each community attended a three day convening with the ESC at the Ford Foundation in New York in June with leading experts in the fields of social services, small business and job development, real estate, and public health.



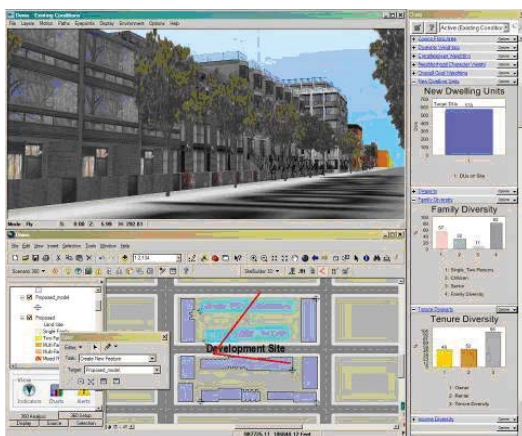
**Examples of how to connect residents of "Shifting Sands Communities" to Human Capital and Physical Plans**

In each of the pilot communities the HD-OD will integrate the human and physical dimensions of a community and will do two things:

1) support an inclusive community-based planning and design decision-making process to formulate Vision and Community Development Plans that include diverse stakeholders; and 2) engage, monitor, and assist in managing the trajectories of the existing vulnerable communities as well as the changes brought about by the development. The HD-OD will enable resource providers to help residents develop individual and household Human Capital Plans and Business Plans that are coordinated with Physical Capital Plans, so they are in a better position to capitalize on opportunities arising from changes occurring in the community. The information provided by the HD-OD tools will enable neighborhoods, individuals, families, small businesses, and non-profit institutions to move away from episodic planning to a continuing process that will simultaneously track changes to people and place over the medium and long term.

**What will the HD-OD do?**

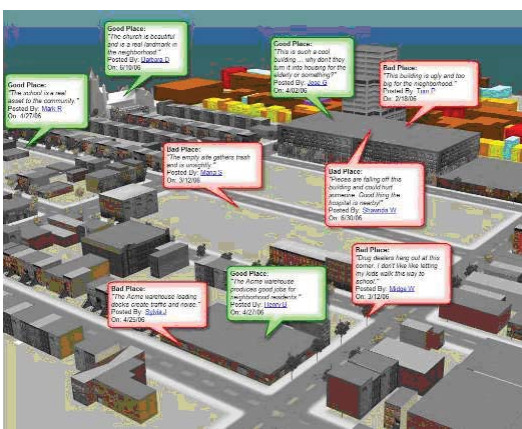
The HD-OD will be a multi-dimensional tool that fully integrates process, method-



**An enhanced CommunityViz™ tool will visually simulate how a proposed development would look in an interactive real-time 3D environment, and how it would perform relative to community indicators.**

ologies, and actions in a technologically mediated environment to provide information to all stakeholders in their decision-making by:

- Making complex situations and decision-making accessible and understandable by using 3D visualizations, information technology and the Internet;
- Placing current information in the hands of residents, stakeholders, and resource providers;
- Providing information when community members need it and at times and settings that are most convenient to them;



**The HD-OD 3D interface will record perceptions –where they agree, where they conflict, and how they change in time – as well as the physical environment as it changes.**

- Providing the capacity for all stakeholders to develop their own indicators for evaluating their performance in meeting goals and objectives;
- Creating a basis for negotiation and compromise through a clear understanding of the tradeoffs and consequences;
- Having all of the change agents—residents, stakeholders, and resource providers—share their decisions with others.

source providers—share their decisions with others.

*(Continued on page 8)*

**For more information:**

Environmental Simulation Center:  
[www.simcenter.org](http://www.simcenter.org)

**About the Author:**

Michael Kwartler is an architect, planner, urban designer and educator, and principal of Michael Kwartler and Associates. He is the founding director of the Environmental Simulation Center. Kwartler is also the Director for Legislative Affairs for the NY Chapter of the American Institute of Architects, and the recipient of the 2007 John Hejoux Award for contributions to the advancement of architecture and cities.



## HD-OD at APA National Conference in St. Paul, MN

The HD-OD has been selected as a panel session at the 2009 APA National Convention. The format will be a moderated panel to support engagement between the moderators, panelists, and attendees. We encourage you to periodically visit the HD-OD website to learn more about the HD-OD, for updates on what is happening at the pilot sites as they adapt and apply the HD-OD to their communities, and to participate in the interactive HD-OD Forums ([www.HDOD.org](http://www.HDOD.org)).

ESC intends their HD-OD interactive database to scale up to a national learning community of interest and practice where information is shared and critically discussed both face to face and using technology. Visit [www.HDOD.org](http://www.HDOD.org) for more information and to participate in the discussion.

# ...HD-OD CONTINUED

These strategies will facilitate and enhance the decision-making capacities of all stakeholders. The HD-OD will have the capacity to manage both hard data (the "facts") and perceptual information, so that interventions can be tracked and evaluated to measure performance, provide accountability, and to take corrective actions. These quick feedback loops are made possible by technology and the dynamic updating of the HD-OD's integrated database by those who live and work in the community.

## Technological Framework

Conceptually, the HD-OD draws on the established precedents of the Overlay District (OD) and planning technology including Geographic Information Systems (GIS), 3D immersive visual simulations, and Planning Design Decision Support Systems (PDDSS). However, these methods, tools and data have traditionally operated separately and been limited to the desktops of professional planners, designers, and policy makers. This is rapidly changing as software applications are connected via the internet and the popularity and power of web-based applications such as Google Earth™ and MS Virtual Earth™ soars. Taking advantage of and furthering these trends, HD-OD will be positioned at the intersection of traditional community outreach, democratic participation efforts and the emerging "Web 2.0" user-generated content paradigm. The HD-OD will seize upon the vast variety of spatially referenced data, both on and off the web, from existing agencies and service providers, as well as actively using and collecting user-generated content. It will create

value by connecting users, applications and technologies to create a whole much greater than the separate parts. This presents a number of technical challenges such as data integration security/privacy, and scalability among others.

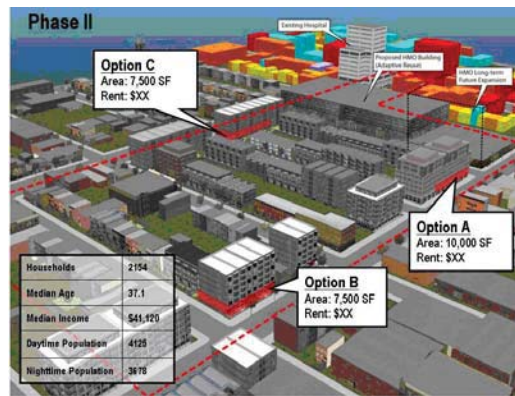
## Community Change Center

Integral to the HD-OD effort will be Community Change Centers (CCC), strategically

located in each pilot site neighborhood. The CCC will act as a "mixing chamber" where people can meet and barriers between "place" and "people" professionals, service providers, and constituents can be broken down. The CCC will also be the steward of the HD-OD and the community-based Vision and Community Development Plans and

Human Capital Plans. The operating principles of the CCC are transparency, accessibility, and "leveling the playing field," by providing timely and accurate information to all of the stakeholders involved in community change. Most importantly, it is designed to support the community's most vulnerable populations and their resource providers so that they can make more informed decisions about their futures. The CCC will evaluate the performance of interventions against the community's, households', and small businesses' own expectations or performance indicators and produce annual "Report Cards."

The HD-OD will be highlighted at the APA National Conference. Please visit [www.HDOD.org](http://www.HDOD.org) in advance of the conference to start the conversation.



**Connecting Human Capital Plans to Physical Plans: Bodega Owners can examine market demographics with the HD-OD Tool**