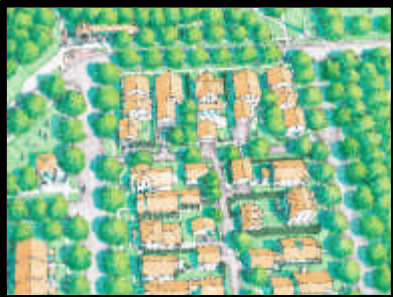


N-vision – Neighborhood Modeling System



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The N-vision neighborhood modeling system offers a means to communicate urbanism clearly in many dimensions. Reusable modeling components have a precise scale, and therefore allow arrangement of urban components by type as opposed to size or style of architecture. They are movable to respond to changing ideas about a particular place. In an interactive, visual conversation, local citizens, stakeholders and designers are able to see and manipulate the same pieces at the same time, and therefore establish community-building priorities together. This modeling tool offers a “human touch” to urban planning and design.

N-vision, the Neighborhood Modeling System (NMS) enables people to visualize urban density and neighborhood form through a highly interactive and tactile planning process. It was designed to plan and design for new, as well as redeveloping, urban forms in the context of compact, walkable neighborhood development.

The system is both entertaining and educational in its use. For planners and designers, three-dimensional modeling is useful for translating community values into an urban form at a realistic scale of reference. For those who are not planners and designers, modeling facilitates better understanding of new neighborhood and redevelopment challenges. Discussion of building arrangement, spacing between buildings, and horizontal as well as vertical mixed-use buildings, generates real opportunities for construction of attractive, walkable, community-oriented places.

As part of larger neighborhood planning and urban design processes, this modeling system can become one component of an informed decision-making process. Whether at the visioning stage of community development, or documenting a well-thought-out neighborhood plan, place-making design alternatives can be discussed and resolved at a scale in which arrangement, volume and massing of buildings are visually apparent.

For this highly tactile way of understanding urban form, two sets of modeling elements are used. One set is paper (planar) in representation. The other is wood (volumetric) in representation. All components represent urban forms at a scale of 1:40. A modeling scale of design (1:40) permits decisions about aesthetics and architectural detail of building to be suspended until issues of urban

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arrangement of buildings and open space, building orientation and desirable local densities are resolved. Since the wood chips simultaneously represent building volume and the spaces between them in a quantifiable and visual form, modeling participants are able to envision urbanism separate from subsequent levels of building and landscape architecture.

The Neighborhood Modeling System can be used in three ways: visualization, design and presentation. Interactive, hands-on workshops using the NMS help citizens visualize neighborhood design. Coded wood chips help an interdisciplinary team design for a new or redeveloping neighborhood, allowing a neighborhood's design to take shape according to evolving judgments about the number of building types and sizes, lot structure, neighborhood density as well as urban design. Once a neighborhood's design has been decided from previous design processes, a wood chip model can be used in a presentation to communicate an agreed-upon neighborhood plan.

The Neighborhood Modeling System (NMS) as it is used today includes a variety of wood pieces ("chips") that represent a variety of building types and sizes at a consistent scale of one inch equals 40 feet (1:40 scale). Each chip is coded by its building type, frontage width, and internal floor space. Also included is a set of planar components for assembling a land plan. The system includes a handbook to describe best practices for modeling compact, walkable neighborhoods. By assembling the planar and volumetric pieces on a tabletop surface, the resulting form renders a visual, three-dimensional representation of a mixed-use neighborhood, corridor or district, and suspends architectural design of individual buildings for subsequent design processes.

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