Housing Within Reach: Innovations in Affordable Housing – February 16-17, 2006

David T. Damery, UMASS-Amherst

The FPS-NE Section and the University of Massachusetts Architecture + Design Program hosted a two-day conference focusing on the topic of affordable housing this past February. The conference brought together national figures in the design and development of affordable housing, developers, planners and other experts in the field. They examined a range of issues including: design innovations, zoning, new materials, and technologies that shape the construction of affordable housing. Over 180 individuals participated in the conference including students, academics, architects, builders, engineers, and zoning officials.

The conference kicked-off the inaugural year of the Massachusetts Architecture Symposium, which will be held annually at UMASS. The prime co-sponsor of the event was the new UMASS Master of Architecture program, the first and only professional architecture degree program at a public university in New England. “We thought a focus on one of the most pressing of social needs would be a good way to launch this annual symposium.” said Max Page, Associate Professor of Architecture and History and a co-organizer of the conference.

The conference keynote address was delivered by Michael Pyatok, of Pyatok Architects, Inc.. His talk, entitled “America’s Housing Crisis”, highlighted the need for collaboration between, facilitators, implementers, and users of housing to meet the growing demand for affordable housing. The remainder of the Thursday night program consisted of a panel addressing national developments in the design of affordable housing. David Brown, the curator
of the HOME House Project, Southeastern Center for Contemporary Art, described a variety of housing designs that were the result of a multi-year national design competition. Prof. Timothy Rohan, UMASS Art History Department, provided a brief history of innovations in affordable housing including the Leavittown project. He finished with a detailed look at some of the features of the Frank Lloyd Wright designed house where he now lives. The last Thursday night panelist, Prof. Paul Fisette, UMASS Building Materials and Wood Technology program, gave an overview of Federal efforts in the area of housing. He described recent efforts by the Department of Housing and Urban Development including the Partnership for Advancing Technology in Housing (PATH). His work on a National Research Council panel investigating PATH goals uncovered the complexity of achieving aggressive affordability goals. Research findings from numerous PATH project can be found at http://www.pathnet.org.

The second day of technical sessions was comprised of four topic areas; New Developments in Affordable Housing in Massachusetts, Land Use and Zoning, Innovations in Design, and New Technologies and New Materials. The first panel included Constance Kruger of the Massachusetts Housing Partnership, who described state and local zoning issues impacting the siting of affordable housing projects. She addressed topics of financing and abutter issues while describing several recent affordable housing developments in Massachusetts. Mark Sternick, of Dietz and Co. Architects, presented case studies of affordable housing projects in Holyoke, Massachusetts and the role of community participation in the design process. Eleanor White of Housing Partners Inc., rounded out the Massachusetts focused panel describing several projects and the frequent need for multiple sources of funding for affordable developments.
Land use and zoning issues were discussed from a number of perspectives including those of: designers, contractors, and town zoning officials. Peter Jessop, a builder and President of Integrity Development, Inc. described the relationship and interaction of land costs, zoning regulations, and construction costs on the affordability of housing. The architectural perspective on zoning and its impact on design was provided by Mary Kraus of Kraus-Fitch Architects. Lastly, Niels Lacour, of the Amherst Planning Department, described the complexities of the Town of Amherst zoning bylaws, and the change process for updating the laws.

Innovations in design for a wide variety of projects were provided by three speakers in the next to last session of the conference. Geoffrey Wooding, Goody Clancy Architects, David Brown, and Sam Grawe, Editor of Dwell magazine, presented images and insights on an array of affordable housing designs from across the United States.

The final conference session addressed the topic of materials and technology. Ben Marcionek and Bob Hodgkinson of Empyrean International, LLC described some of the many technologies that are employed in their manufactured housing systems to drive cost out of the process. Charlie Curcija, UMASS Department of Mechanical Engineering, described the role of glazing in design for affordability. The final presenter was Larry Sass, Assistant Professor of Architecture at MIT, who described an integrated process of computer assisted design, and computer aided manufacturing in small scale production of affordable housing components.

One of the conference co-sponsors was the Cowls Companies of Amherst, Massachusetts. They have offered to donate a plot of land on which to build a model home,
affordable to middle-income residents of Amherst, that will be built according to a design being developed by UMASS architecture students. The conference facilitated contact between students and practitioners in the field that directly informed work in the spring semester 2006 design studios led by UMASS faculty.

Conference Proceedings including speaker presentations are available at:

In addition, conference attendees, were given a briefing booklet as part of their conference package. The publication includes conference information and a case study of Innovations in Affordable Housing in Amherst, MA. A PDF version of the briefing booklet is available at:

This conference was underwritten by the Forest Products Society, The Cowls Companies, the Western Massachusetts chapter of the American Institute of Architects, and the Office of Research at UMass.