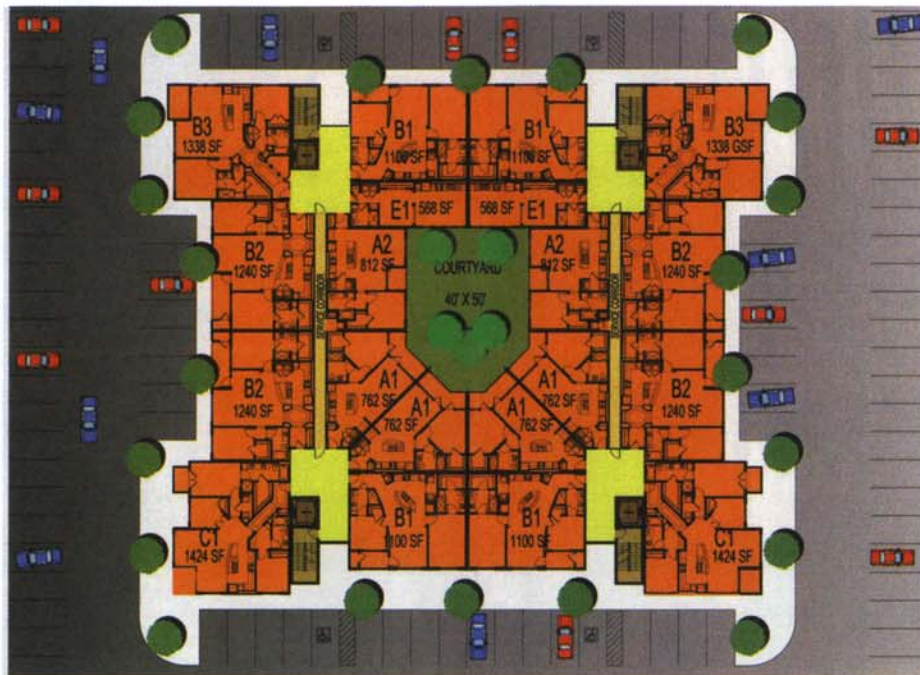# The New Mid-Rise

Humphreys & Partners' new design fits 96 wood-frame apartments onto two acres—along with their cars—without a garage. By Bendix Anderson

By **saving space** on hallways, this 96-unit building, made entirely out of wood, finds room on its two-acre site for 160 surface parking spaces.

Mark Humphreys can't keep the triumph out of his voice. "I'm saying this as humbly as I can," he said. "We figured it out. Problem solved."

Humphreys, CEO of Humphreys & Partners Architects, L.P., based in Dallas, is talking about his new "e-Urban" design for mid-rise multifamily buildings, a plan that he says will be more than 20 percent cheaper to develop than conventional construction.

The new design gets rid of the long, hotel-style hallways that form the backbone of most mid-rise apartment buildings. According to Humphreys, only 65 percent of the total space in many conventional buildings like these can be sold, rented, or offered to residents as an amenity. The other 35 percent is taken up by hallways, lobbies, and space for boilers and other infrastructure.

More efficient apartment developers like JPI, based in Irving, Texas, can build a four-story single-elevator building in which 75 percent to 83 percent of the space is rentable by keeping the long hallway as thin and efficient as possible, according to Aaron Liebert, senior vice president for JPI.

Humphreys' e-Urban design goes even further, creating buildings in which about 87 percent of the space can be rented or sold by effectively trading long hallways for elevators.

For example, a Humphreys' e-Urban design for a two-acre site would put four elevators into a five-story wood-frame building with 96 apartments. Each elevator would open onto an antechamber ringed with four or five apartment doors on each floor.

That's a lot of elevators, which can cost as much as $75,000 each to purchase and install, Liebert said, not including the cost of maintenance. Plus, each elevator needs its own entrance door to the outside. But all this hardware is relatively cheap compared to the cost of building the conventional 10-foot wide corridor connecting all of the apartments on a floor to a single elevator bank.

That long hallway will never bring income to its building, but it still costs money to build and maintain.

Parking perils

The e-Urban design also saves money on the cost of parking. According to Humphreys, a conventional Dallas apartment design might fit 110 units onto a two-acre site with the usual long hallways and a concrete parking garage with about 170 spaces. The hard cost to build the whole project would probably run to about $105 per square foot, Humphreys said.

Developers like Russ Davis, president of Terwilliger, Davis, and Leadbetter, based in Greenville, S.C., agree that, in their experience, it's been impossible to create a mid-rise building that averages 40 apartments per acre and 1.6 parking spaces per apartment without building a concrete parking garage. The typical cost

The Rising Cost of Construction

Most buildings waste a fifth of their space on hallways they don't need, according to Mark Humphreys, CEO of Humphreys & Partners Architects, L.P. If builders cut that wasted space, they could spend more on architectural details—or they could simply price their units below the competition.

of parking spaces in these structures is more than $20,000 each.

Projects like these have been pushed to the breaking point by high land costs that require developers to add more units to bring in more income. That in turn means their developments often need structured parking or extra height. Those features necessitate building with concrete instead of wood, pushing costs even higher and requiring the finished units to rent or sell at the highest prices the market can absorb.

But because the e-Urban design squeezes more apartments into a smaller building, Humphreys' plan for 96 units can find room on its two-acre site for 160 outdoor parking spaces at ground level. That's an average of 1.6 parking spaces for every apartment, assuming an average apartment size of 1,035 square feet.

Humphreys figures his design can be built in Dallas for just $75 per square foot.

Dialing up the density

Other versions of the e-Urban design can squeeze an average 88 or even 97 units onto an acre—still with an average 1.6 parking spaces for each apartment. Each of these designs calls for a two-story underground concrete parking garage, but the four floors of apartments built over the garage can still be made out of wood.

In contrast, to fit this many apartments and parking spaces onto an acre, most conventional designs would have to build more stories, which would require more expensive materials like concrete for both the apartments and the parking structure.

Since Humphreys announced the new design in mid-May, the firm has been flooded with inquiries. "Our phone has been ringing off the wall," he said.

Many of these potential clients are condominium developers who bought land in markets where softening condo prices will no longer support the developments they planned to build. For these developers, Humphreys' space-efficient design couldn't have come at a better time.

At press time, just two weeks after the plans were released, the firm was already working with six developers to build e-Urban projects and had received nearly 50 calls in a handful of days.

Humphreys is well known already as the designer of the Big House, a design which arranges groups of apartments in buildings that look, from the outside, like large single-family homes. Humphreys has worked with developers to create more than 200 Big House projects, totaling $4 billion to $5 billion in development costs, he said. "The e-Urban design is going to be bigger," he said. ■