

## Workforce Housing and Climate Change

The location of workforce housing—and all types of housing—is critical to planning how land is used in light of climate change and global warming. It is key to designing the compact communities needed to reduce the greenhouse gases emitted every day in the United States from the built environment and from the vehicle miles traveled (VMT) due to low-density development.



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REDUCING THE EMISSION OF carbon dioxide is central to stabilizing Earth's temperature at a level below two degrees Celsius above preindustrial levels. Temperature beyond this level, according to the Intergovernmental Panel on Climate Change, must be avoided to prevent unpredictable and uncorrectable changes in the climate. In short, it is the critical tipping point beyond which the planet and the future of mankind are at risk.

As a report recently published by ULI—*Growing Cooler: The Evidence on Urban Development and Climate Change*—illustrates, compact development results in significant reductions in carbon emissions, the major greenhouse gas. Thus, the location of housing—workforce, affordable, and market rate—is a core element in the response to global warming. It is also important to keep in mind the significant calculation made by the U.S. Department of Energy's Energy Information Agency that 47 percent of all carbon emissions come from buildings, and another 16 to 17 percent come from people driving back and forth among these buildings.

There are two overarching principles to guide the real estate industry in responding to the need to dramatically reduce carbon emissions:

- ▷ **Build efficiently.** This includes both constructing buildings (processes and materials) and operating them in ways that reduce or eliminate carbon emissions.
- ▷ **Locate efficiently.** To locate buildings efficiently requires building in well-designed compact communities that are linked, where possible, to transit; that provide housing afford-

able to all income levels and ages; and that contain a mix of retail, commercial, and light-industrial buildings that taken together constitute a complete, viable, and sustainable community in which people can live and work.

Given that U.S. metropolitan regions currently are developed at low densities, the second principle is the more complex and challenging. Locating buildings in well-designed compact communities achieves a number of key objectives, among them:

- ▷ **Reduces the amount of infrastructure needed.** Roads and water and sewer lines will all be shorter and cost far less to build and maintain than they do in the traditional American low-density suburb. Overall, this reduces the energy used to build and maintain them—which reduces carbon emissions.
  - ▷ **Shorter roads and a walkable community decrease vehicle miles traveled (VMTs), limiting the amount of carbon emissions from cars and trucks.** Every home needs to be connected to the destinations each day of its occupants—stores, schools, friends, churches, etc., as well as jobs (which are only some 20 percent of all miles traveled by cars). Sometimes known as house miles, the fewer of these miles traveled by car, the less carbon sent into the atmosphere.
- With housing as a key component of any community, thought needs to be given to the mix of uses. Finding the right mix is crucial; otherwise, residents may be forced to live some distance from where they work and shop and are forced to drive back and forth.

What, however, is the right mix?

There are certain key principles to consider:

- ▷ **The housing mix needs to reflect the entire community.** Anyone unable to find the right kind of housing, because it is built too far away from the community or because it is not affordable, will be forced to drive to jobs and services, undermining the value of creating the compact community in the first place.
- ▷ **The mix needs to include housing for people of all incomes and in all stages of their lives.** It includes the full range of market-rate housing, housing affordable to all working families who cannot afford market-rate housing, an appropriate amount of housing for lower-income families, and housing for low- and moderate-income elderly.
- ▷ **The typology of housing should be mixed—rental and ownership, townhomes, small single-family detached, and multifamily of various sizes.**

Many years ago the concept of the “housing ladder” was developed to suggest how people use houses during the course of their lives and how the housing market should be constructed to reflect and support these changing uses. Just as there are stages in people's lives, there need to be different types of housing for each of these stages. The different types of housing constitute the “rungs” in the housing ladder.

The housing ladder begins as people, generally in their 20s, leave home to form their first independent households. This group generally rents housing in some form. Today, this group has expanded to a large

cohort known as echo boomers, the offspring of baby boomers. Rental housing is generally the first rung of the housing ladder.

The next stage occurs when a household decides to buy a first home. Historically, these homes have been small, usually older existing homes that their owners sell when they move to yet a higher rung on the ladder—a bigger home, perhaps newly constructed, in a better neighborhood in which to raise their children. In the past few years, however, many first-time homebuyers have been able to buy larger new homes because of low interest rates and, unfortunately, lax underwriting standards.

Though interest rates remain low today, and may well continue to do so for some years, loan underwriters have grown conservative. It is problematic how many echo boomers will be able to buy anything other than a very modest first home, if that, and climb the next rung on the housing ladder. This problem, in turn, already is making it difficult for those in their 30s and 40s to buy new, larger homes as they are finding it hard to sell their current homes. Consequently, the housing ladder is, for now at least, becoming clogged by the sharp slowdown in the housing markets around the country.

At the other end of the age spectrum, people in their 50s become empty nesters and many of them sell their large homes (by now, empty of children) and move to smaller more urban homes or to a different location altogether—many to the Sunbelt. Baby boomers may be going through this process or considering it. The homes they sell—if they can—free up places for younger families to follow.

As people reach their 70s and 80s, they often return to rental housing, whether a smaller apartment or some form of retirement, life care, or nursing facility. This, in turn, frees up their housing for those just behind them on the housing ladder.

In this way, as households form

and change, people progressing through the different stages of their lives move into and out of homes to find those that best suit their ages, lifestyles, and pocketbooks. If housing markets are to work well, they need to provide these various forms of housing. Each type of housing should be located where people live and work—and each needs to be affordable.

Over the past 60 years, U.S. housing markets have been able to keep those on the rungs of the housing ladder moving remarkably well, largely because consumers

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were able to drive increasing distances from housing they could afford to their jobs and back. Relying on the car to keep housing affordable, however, is no longer a viable option for the long term if the United States is to reduce the amount of greenhouse gases it pours into the atmosphere each year.

The housing ladder also has broken down for lower-income households; government housing subsidies that were once designed to support people until they earned enough income to afford market-rate housing no longer do this. Today, federal subsidies focus primarily on three groups:

▷ The poorest group may be subsidized through public housing and vouchers, which generally serve households that are below 20 percent of local area median incomes (AMI);

▷ Households that earn 50 to 60 percent of the local AMI qualify for the low-income housing tax credit

program; and

▷ Those households that are most well off may qualify for tax subsidies through mortgage interest deductions.

These subsidies still leave large gaps in many communities across the United States where the cost of housing has risen so high that residents must pay from 100 to 200 percent of the AMI to have a decent home near the workplace. In short, the housing ladder has broken rungs. Fixing it—by providing housing close to jobs and services in compact communities—also is important to reducing carbon emissions and meeting the new realities of global warming.

It could be argued that there is really little shortage of workforce housing—as long as its location is unimportant. For the last 60 years, since Levittown was started in Hempstead on Long Island, New York, the United States has continued to build moderately priced housing in ample supply on the outskirts of already developed areas. The location of these outskirts, however, has moved considerably farther out over the decades.

Levittown, for example, was built on fallow potato fields that were sold because of a potato blight; the fields were some 30 miles from downtown Manhattan. Today, the most affordable housing being provided by the New York City regional market—without subsidies—is in eastern Pennsylvania, some 120 miles away (which, believe it or not, is still within the Manhattan commuter shed). The same is true for most every city in the United States; though their outer edges may be somewhat closer than those of New York, they have spread far out from where they were 50 years ago.

For this reason, the ULI Terwilliger Center for Workforce Housing currently is focusing on spurring workforce housing development in central cities or close-in suburbs so that the housing will be both affordable and located near work and shopping. ULI's chairman, Todd

Mansfield, recently appointed a new committee, called the Energy, Land Use, and Climate Change Advisory Board, and presented several key ULI initiatives to address workforce housing, outer-edge suburban development, infrastructure, and reduction of carbon emissions—which are all pieces of the same puzzle.

Whether located in a central city, close-in suburb, or a compact new neighborhood on the suburban edge, a community not only should have a mix of uses but also a complete housing ladder. Achieving this is a challenge. Finding ways to build ownership and rental housing that everyone in a community can afford simply is beyond the capacity of housing markets today—costs of production are too high and incomes for many are too low.

It will take aggressive government involvement to achieve the proper mix of uses. Federal housing programs need to be expanded to provide housing affordable to those who cannot afford market-rate housing in compactly designed communities. These programs need to be geographically targeted, which generally has not happened in the past. The same is true for state programs. Meanwhile, local governments need to rethink zoning and building codes, as well as develop their own programs to provide housing for all those in the community on the housing ladder.

In short, it will take concerted government action to repair the broken rungs on the housing ladder. This is not just a housing or community development issue, as it has been considered in the past. It has become a central part of the fight against global warming and for a climate in which our children can live, work, and thrive. **U**