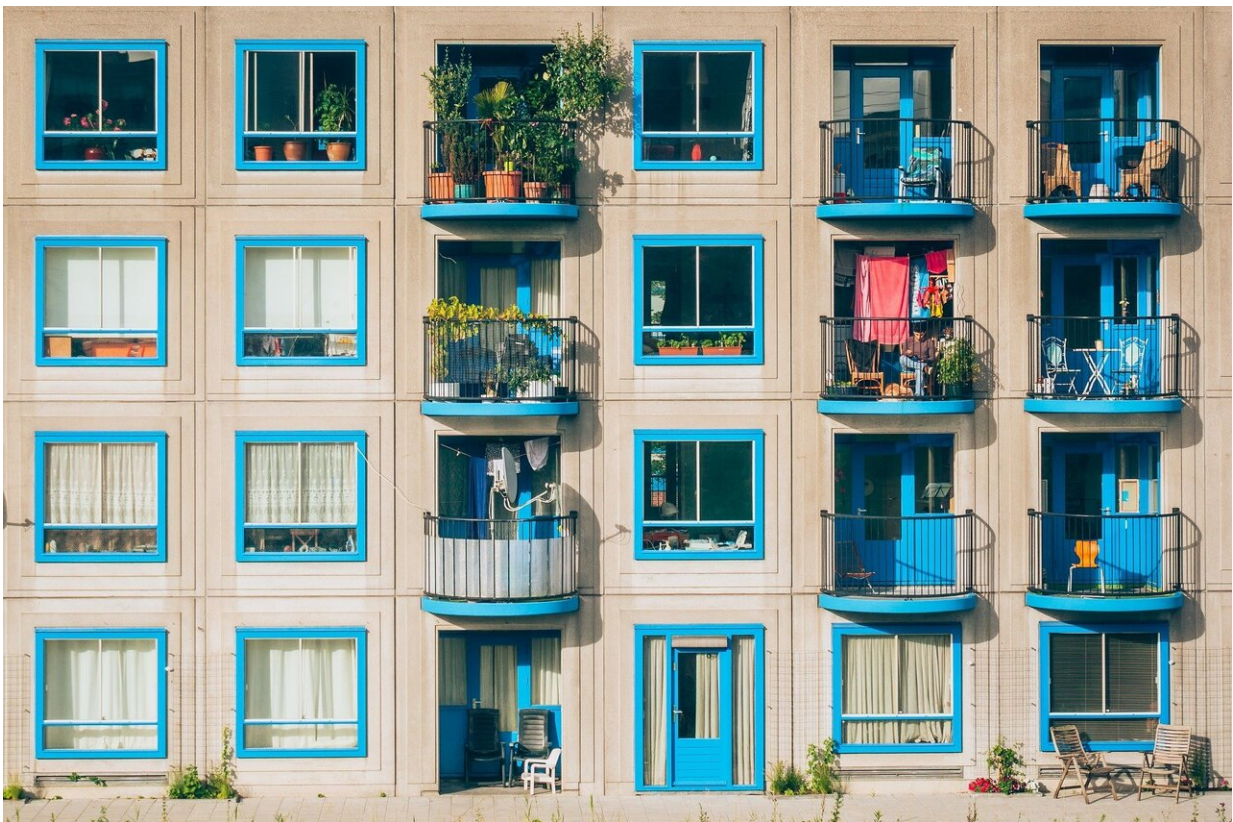


Upgrade low-income housing to improve public health, the environment and racial equity all at once

March 24 2021, by Jonathan Levy



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During a presidential election debate on Oct. 22, 2020, former President Donald Trump [railed against Democratic proposals to retrofit homes.](#)

"They want to take buildings down because they want to make bigger windows into smaller windows," he said. "As far as they're concerned, if you had no window, it would be a lovely thing."

What a difference five months makes. While replacing your big windows with small ones is not on the Biden-Harris administration's agenda, increasing [home energy efficiency](#) is. Addressing these and other [housing](#) issues is critical for three of the new administration's [immediate priorities](#): ending the COVID-19 pandemic, addressing climate change and tackling racial and economic inequality.

As an [environmental health researcher](#), I have studied ways in which inadequate housing influences health and disproportionately affects [low-income families](#) and communities of color. In my view, retrofitting low-income housing in particular is a high-leverage way to tackle some of our nation's most pressing health, social and environmental challenges.

Housing shapes everything

The pandemic has spotlighted how directly housing affects people's health. It's intuitively clear that physical distancing is hard if your family lives in a few rooms. And studies have shown that crowded indoor environments, including houses and apartments, are [high-risk settings for contracting COVID-19](#).

Housing also is a substantial contributor to [climate change](#). [About 20% of all U.S. greenhouse gas emissions](#) come from residential energy use. Large homes generally use more energy, but lower-income homes are often less energy-efficient, which makes them costly to heat and cool.

One recent survey found that between spring 2019 and spring 2020, 25% of low-income American households [were unable to pay an energy bill](#). Families may be forced to [cut necessities like food or medicine](#) to pay

energy bills, or endure [unhealthy temperatures](#). As changing climate lengthens summer, and there are more scorching hot days, those who lack air conditioning or can't afford it are in danger.

Racial inequities in housing aren't random. For generations, [discriminatory policies](#) kept Black and other minority households from purchasing homes in many neighborhoods. There are large racial gaps in both [homeownership rates](#) and the availability of high-quality housing across the country.

Potential policy solutions

Now, for all of these reasons, housing is in the political spotlight. The Biden-Harris presidential platform included [home energy efficiency retrofits](#). The new American Rescue Plan Act, which President Biden signed into law on March 11, includes [housing provisions](#) meant to forestall an eviction crisis and to reduce energy insecurity. Secretary of Housing and Urban Development Marcia Fudge has pledged to [prioritize fair housing](#).

These efforts are all related. Energy-efficiency investments in low-income housing have broad ripple effects, including financial relief for residents, lower carbon emissions and healthier indoor environments.

But there are key questions. Will agencies address these issues as siloed challenges or in an integrated way? And will federal leaders and members of Congress see strategic investments in housing as a strategy that offers broad societal benefits?

The state of low-income housing

[Data from the American Housing Survey](#) demonstrates some of the challenges low-income households face. Many of the [more than 30](#)

[million Americans](#) who live below the poverty line crowd into smaller, older homes. Often these dwellings have structural deficiencies like pest infestation, mold, peeling paint and exposed wiring.

Living in these environments creates [health risks](#) from exposure to lead paint, allergens and indoor air pollution. The economic challenges of the pandemic, with people spending much more time at home, have heightened these risks.

Poor conditions also plague many chronically underfunded [public housing developments](#). Given how vulnerable many public housing residents are, I see upgrading these buildings as critical.

The benefits of energy efficiency

Well-designed energy-efficiency measures provide economic, health and climate benefits in single-family and multifamily homes, including in low-income housing. My research demonstrates both the promise and potential pitfalls of various measures.

For example, [better insulation](#) lowers electricity and fuel consumption. In turn, this saves money, improves outdoor air quality and reduces greenhouse gas emissions.

However, upgrades can be done well or badly. We found that weatherization alone, without other improvements, [may actually increase indoor air pollution](#) in low income, multifamily housing, especially in homes where people smoke or cook frequently with gas stoves. That's because steps like adding insulation and sealing cracks trap indoor air pollutants inside. Coupling weatherization with steps such as adding kitchen exhaust fans and high-efficiency particle filters in heating and air conditioning systems produces healthier results.

Are there win-win-win scenarios?

If better housing saves money, makes residents healthier and more comfortable, improves air quality, decreases greenhouse gas emissions and reduces racial disparities, why don't we have more of it?

One reason is that those who pay for improvements—landlords or government agencies—often aren't the ones who directly benefit from living in a less drafty home with cleaner air. Likewise, it's rare for health care providers to consider housing upgrades as an approved clinical intervention.

But that could change. A [recent study](#) showed that providing stable, affordable housing improved physical and mental health for both children and adults. [Green building strategies](#) have been shown to [improve health](#), lessen asthma symptoms and reduce health care costs. Healthier kids miss less school and earn better grades.

Strategic federal investments could ultimately save taxpayers money and improve health. [A 2020 study showed that](#) federal rental assistance—which helps families afford better housing—led to reduced emergency department visits for asthmatic children, saving money for the Medicaid system. Subsidized energy efficiency upgrades also increase property values, which helps address long-standing [racial disparities in wealth](#).

The Department of Housing and Urban Development typically gets little notice from the public, especially amid a global pandemic when Americans are focused on vaccinations and the economy. But Secretary Fudge has an opportunity to spotlight housing as a lever for improving health, the environment and economic and racial equity. All without shrinking anyone's windows.

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