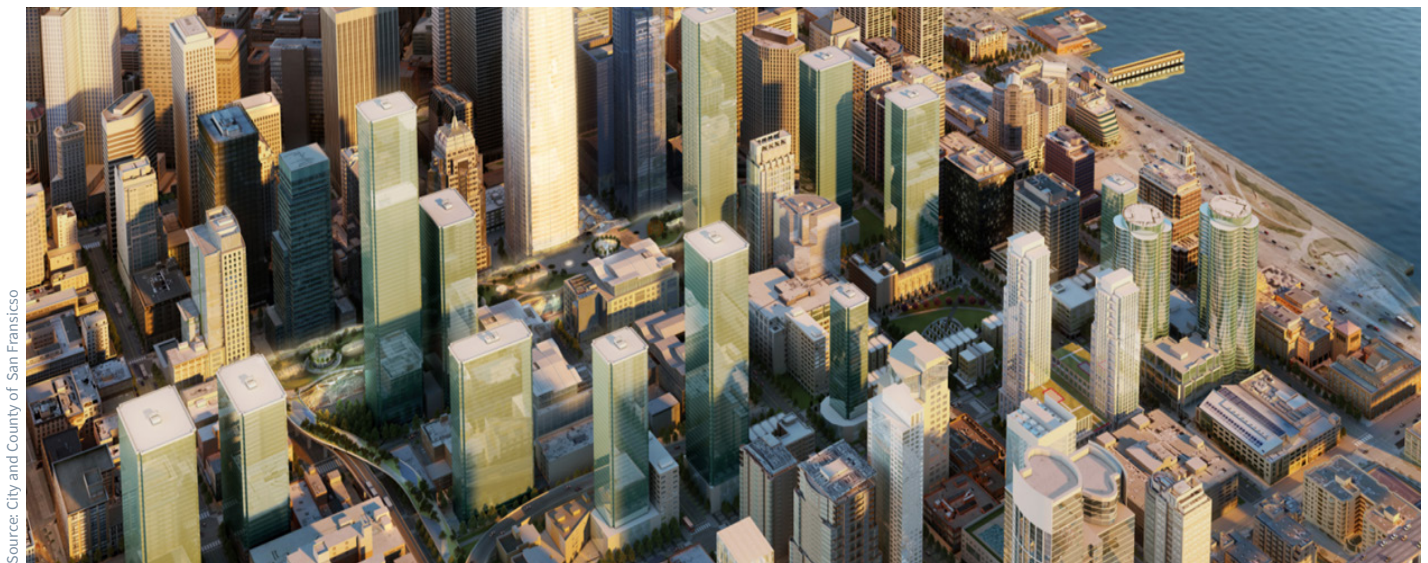


# AFFORDABLE HOUSING ON BROWNFIELD SITES

RESEARCH FROM THE FIELD



Source: City and County of San Francisco

## DEFINING HOUSING AFFORDABILITY

The Canadian Mortgage and Housing Corporation consider housing is “affordable” if it costs less than 30% of a household’s before-tax income. This definition encompasses all forms of housing tenure: rental, ownership, co-operatives, temporary and permanent housing.

This column summarizes the key themes and findings and provides recommendations based on the article Squires, G., Hutchinson, N., (2021). Barriers to affordable housing on brownfield sites. *Land Use Policy*, 102. <https://doi.org/10.1016/j.landusepol.2020.105276>.

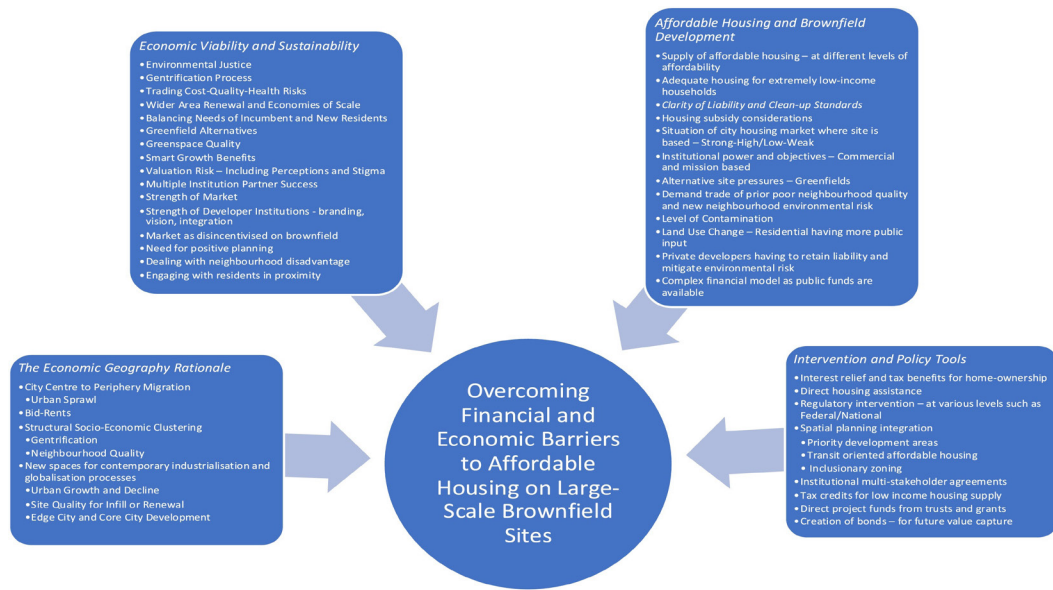
## UNDERSTANDING THE IMPORTANCE OF AFFORDABLE HOUSING ON BROWNFIELD SITES

By Rebecca Tom [in](#)

Brownfield sites are already perceived to be financially risky for development due to the costs of environmental assessment and remediation. As a result, the possibility of including affordable housing in brownfield redevelopments is even more challenging.

However, many cities are redeveloping previously industrial sites in response to urban growth and large-scale brownfield sites provide an opportunity to increase the supply of affordable housing for a community. This is particularly important in cities that are currently experiencing a housing affordability crisis. For example, the City of San Francisco has experienced a high market demand for housing, but the city adds a relatively small supply of affordable housing each year.

Graham Squires and Norman Hutchinson, two researchers from Massey University and the University of Aberdeen, have developed a conceptual model that explains the economic barriers and concerns from the perspectives of the developer and local community that prevent affordable housing on large-scale brownfield sites.



Source: Norman and Hutchinson (2021)

## CONCEPTUAL MODEL OF THE BARRIERS TO AFFORDABLE HOUSING ON BROWNFIELDS

Squires and Hutchinson first developed this theoretical model and then tested the model by applying it to three large-scale developments in San Francisco in which their total number of new units consisted of at least 30% affordable rental units. Their model is organized into four subthemes.

### ECONOMIES OF SCALE

Brownfield sites are already often more difficult to make economically viable compared to greenfield sites, even without affordable units unless they are located in the downtown core or close to desired amenities, such as public transportation hubs or employment centres.



Source: University of California San Francisco

The larger the size of the brownfield site, the more intensive and costly it will be to remediate. Without a sufficient profit following the remediation process, it may not be feasible for a developer to include affordable housing unless significant density is permitted for better economic return.

### FINANCIAL VIABILITY

Developers are often driven to obtain brownfield sites for redevelopment based on market demand but are then stalled by applications for affordable housing and remediation funding from government and non-profit partners.

*“When the market rate is ready to go, it needs to go. You can’t sit around; the market is volatile. Whereas on the affordable side, a lot of times we have to wait for tax credit allocations.”*

- Affordable Housing Developer from an interview with Graham and Squires (2021)



Source: US Department of Housing and Urban Development

In addition, private developers are disincentivized to build affordable housing if they must continue to retain liability after construction for affordable housing tenants.

## ENVIRONMENTAL AND COMMUNITY SUSTAINABILITY

The potential concerns of the local community are also another notable barrier to consider. While a brownfield redevelopment can improve the livability of a neighbourhood, these projects can potentially lead to gentrification and price out existing disadvantaged residents in the surrounding area, particularly if the site is located in a low-income, racialized community.

## AFFORDABLE HOUSING QUALITY

Developments should include a range of housing units that fall along the spectrum of affordability, including purpose-built affordable rental units and deeply affordable units in order to suit the needs of a variety of household types



Source: US Department of Housing and Urban Development

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***Based on this conceptual model, it is clear that affordable housing on brownfield sites is financially challenging, given that developers often need to finance the remediation and assessment costs. The possibility of including affordable housing is highly dependent on the potential profits derived from the future site.***

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## RECOMMENDATIONS AND REFLECTIONS

Several recommendations and partnership options based on this conceptual model can be drawn for practitioners in the private, public and non-profit sectors to increase the viability of these projects.

The use of multi-stakeholder and inter-agency agreements for affordable housing on brownfield sites is vital but lacking in many municipalities. City planning departments should explore partnerships with other municipal departments (i.e., public transportation service agencies, parks and recreation) and the regional and national government to increase the mix of financial tools at both the scale of the unit and city-wide. These funding and policy partnerships should also be established proactively as this is one of the main barriers noted by developers.

Brownfield sites that are being converted to residential uses will often include more public input, particularly if it is a site that is heavily contaminated or in a location with strong market demand. If the brownfield site is located in a low-income neighbourhood, the ability for existing residents to have public participation and input in site design should be a top priority for planners involved in the development project.

Canadian Mortgage and Housing Corporation (2018). About affordable housing in Canada. <https://www.cmhc-schl.gc.ca/en/developing-and-renovating/develop-new-affordable-housing/programs-and-information/about-affordable-housing-in-canada>.

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