

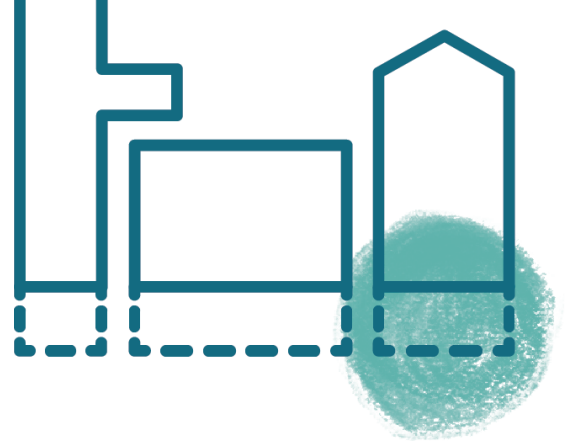
BASEMENT & CELLAR REGULATORY REFORMS

December 2020

Many of New York City's basement and cellar apartments exist within the gray market, due to the financial and regulatory barriers faced by homeowners wishing to undertake a conversion. Keeping these housing arrangements informal jeopardizes the safety and security of both tenants and homeowners, empowering neither with leasehold rights, and allows for unsafe living conditions. Streamlining a pathway for the conversion of basements into safe, legal apartments would make these arrangements safer and more stable for homeowners and tenants, and add urgently needed housing supply during a health, economic, and housing crisis.

Regulatory innovation may be the most powerful tool that policymakers have to create housing as we continue to face a global pandemic that has decimated government budgets.

There are opportunities to reduce both the cost and complexity of the conversion process by studying the intent of our construction codes and laws and considering alternative pathways for compliance. Some prohibitive regulations are vestiges of the code revision process (sometimes unintended), are outmoded by technology, or are the result of well-intended but occasionally excessive legislative responses. The following pages identify several regulations that, if revised, could facilitate basement and cellar conversions in the private market.



IN BRIEF

Regulatory innovation, all the more important when financial resources are limited, could enable the creation of basement and cellar apartments by reducing the cost and complexity of the conversion process.

The following policies could address some of the most challenging regulatory barriers that homeowners confront when undertaking a conversion:

1. **ALLOW CELLAR OCCUPANCY**
2. **CREATE A DOB POINT OF CONTACT**
3. **PERMIT 7'-0" CEILING HEIGHT**
4. **ISSUE A PARTIAL CERTIFICATE OF OCCUPANCY**
5. **REGULATE GLAZED AREA IN AGGREGATE RATHER THAN BY WINDOW**
6. **WAIVE PARKING REQUIREMENTS FOR SUBGRADE UNITS**
7. **EXCLUDE CELLARS FROM FAR WHEN CONVERTED INTO A DWELLING UNIT**
8. **CONSIDER A TWO-FAMILY HOME WITH A SUBGRADE UNIT AS A PRIVATE DWELLING INSTEAD OF A MULTIPLE DWELLING**
9. **EXEMPT NEW MULTIPLE DWELLINGS FROM ADEQUATE ADJACENT SPACE REQUIREMENT**
10. **ABATE PROPERTY TAXES TO OFFSET TAX INCREASE DUE TO CONVERSION**
11. **EXPAND NON-METALLIC PIPING OPTIONS FOR SPRINKLER SYSTEMS**
12. **EMBRACE WATER MIST SPRINKLER SYSTEMS FOR RESIDENTIAL APPLICATIONS**
13. **CREATE AN AMNESTY PROGRAM FOR WORK THAT HAD BEEN PREVIOUSLY DONE ON A SUBGRADE UNIT WITHOUT A PERMIT**

1. Allow Cellar Occupancy

Cellars and basements are below-grade stories that are differentiated by the proportion of their story height below ground. A cellar has more than 50% of its floor-to-ceiling height below curb level whereas a basement has 50% or more of the story above curb level. This is an arbitrary distinction that does not indicate the degree of habitability. Yet cellar occupancy is expressly prohibited in one- and two-family homes by the New York City's Housing Maintenance Code and is conditional within multi-family homes on meeting challenging site requirements.

Ref:

- [NYC Housing Maintenance Code §27-2087a](#)
- [NYS Multiple Dwelling Law §34](#)
- [NYC Zoning Resolution §15-122](#)

2. Create a DOB point of contact

DOB staff was integral to the development and implementation of the basement conversion pilot. Homeowners and their advocates would benefit from having an agency contact who could answer technical and process questions, especially when participating in a novel city program. Those with financial means and development experience would typically hire an expeditor to help navigate DOB and the conversion process. This type of service is inaccessible to low-income homeowners who would benefit the most from a conversion program. As a free or low-fee service, the agency contact could be an individual dedicated to the conversion program or a member of a Small Home Innovation Unit where technical matters could be vetted with counterparts at other city agencies like BSA and HPD.

3. Permit 7'-0" ceiling height

New York City codes allow a range of ceiling heights from 7'-0" to 8'-0" depending on the use of the space (habitable versus occupiable), the number of dwelling units in the building (one-family, two-family, or multi-family), and story level (basement, cellar, or above grade). Generally, habitable spaces including bedroom, dining room, living rooms, and kitchens, must have 8'-0" clear excluding beams that may protrude below the ceiling. Basements are subject to several ceiling height exemptions.

Habitable rooms in basements of one-family homes are permitted to have a ceiling height of 7'-0", however, if that basement is rented to person outside of the family, the ceiling must meet 8'-0" according to the requirements for a two-family home. Multiple dwellings may have up to four 12" wide by 6" deep projections that allow their habitable basement rooms to have effective ceiling heights of 7'-6" when coupled with minimum plan dimensions (§1208.1). Basements in two-family homes are subject to the most onerous requirement of 8'-0".

There is precedent for allowing lower ceiling heights. For example, the 2018 International Residential Code (IRC) allows for 7'-0" ceilings in habitable rooms within basements, and Canada's Ontario province and its most populous city Toronto allow ceiling heights in basement and cellar apartments as low as 6'-4 3/4". New York City's rationale behind basement ceiling height requirements is not clear. If ceiling height requirements are intended to ensure a level of fire safety related to smoke accumulation, heat, and toxicity, room volume is a better indicator than ceiling height alone. CHPC is undertaking an engineering analysis to understand the marginal change in fire risk associate with ceiling height and room volume.

Ref:

- [2014 NYC Building Code §1208.2](#)
- [2018 International Residential Code §R305.1](#)
- www.ontario.ca/page/add-second-unit-your-house

4. Issue A Partial Certificate Of Occupancy

Issuance of a partial Certificate of Occupancy is an important administrative component of a basement conversion program. This limits government liability to the conversion work and existing violations issued to the property. Similarly, homeowners may be less reluctant to engage with enforcement agencies if scrutiny is focused on the conversion work.

Ref:

- 2014 NYC Building Code §111

5. Regulate Glazed Area In Aggregate Rather Than By Window

The current text of the 2014 Building Code conflicts with the requirements of the Housing Maintenance Code. When Chapter 12 of the Building Code was adopted, the provision requiring every window to be at least twelve square feet when contributing to natural light was intended to apply only to multiple dwellings; however, the text erroneously applies to one- and two-family dwellings as well. Minimum window dimensions could be governed by Emergency Escape and Rescue or ventilation requirements rather than lighting since the prescriptive geometric requirements do not necessarily guarantee a certain amount or quality of light. New technologies like light wells and circadian lighting, offer alternative ways to improve interior lighting.

Ref:

- 2014 NYC Building Code §1205.2 and §1029
- NYC Housing Maintenance Code §27-2062
- NYS Multiple Dwelling Law §30

6. Waive Parking Requirements For Subgrade Units

New parking is a significant impediment to the development of subgrade apartments. The Zoning Resolution includes a number of caveats that reduce or eliminate parking in certain circumstances, for example, in higher density areas and some small lots. Some basement “conversions” are exempted from the provision of new parking, while cellar “enlargements” are not (ZR §25-211). In the case of the East New York pilot, nearly all eligible residential properties fall within a Transit Zone where basement or cellar occupants have access to public modes of transport.

Ref:

- NYC Zoning Resolution §25-20



7. Exclude Cellars From FAR When Converted Into A Dwelling Unit

Cellars are excluded from floor area calculations except when used for dwelling purposes. Adding a basement apartment does not add to existing residential floor area while a cellar apartment does. If the inclusion of cellar floor area raises the total floor area above the limit allowed for a particular zoning district, the creation of the cellar unit would not be permitted. The floor area ratio is a metric that helps to define bulk regulations for a neighborhood. It is reasonable for the city to exempt cellar apartments from floor area calculations if the building envelope does not change.

Ref:

- NYC Zoning Resolution §12-10

8. Consider A Two-Family Home With A Subgrade Unit As A Private Dwelling Instead Of A Multiple Dwelling

Multiple Dwelling Law (MDL) applies to residential buildings with three or more dwellings units. This is reflected in the Housing Maintenance Code which references and restates much of the MDL. The Building Code also draws a distinction between one- and two-family homes (R-3) and a multiple dwelling (R-2) when defining occupancy classes. Technical requirements typically become more onerous for multiple dwellings. The city and state could exclude a single basement or cellar unit from the dwelling unit count when determining whether a building is a private or multiple dwelling.

Ref:

- NYS Multiple Dwelling Law §4
- NYC Housing Maintenance Code §27-2004
- 2014 NYC Building Code §310

9. Exempt New Multiple Dwellings From Adequate Adjacent Space Requirement

Code allows basement and cellar occupancy in multiple dwellings provided that at least half of the story height and all windows fall above an “adequate adjacent space.” This phrase refers to a large unobstructed swath of land on the same lot or a public way that measures 30’ in its least dimension. Any part of the apartment below the adequate adjacent space must fire-retard all walls, partitions, and ceilings and provide a sprinkler system. Two-family dwellings that qualify as multiple dwellings because of the addition of a basement or cellar unit could be exempt from the adequate adjacent space requirement.

Ref:

- NYS Multiple Dwelling Law §34.6
- NYC Housing Maintenance Code §27-2082

10. Abate Property Taxes To Offset Tax Increase Due To Conversion

Capital improvements increase a property’s market and assessed value, which is reflected by an increase in property taxes. State law limits the annual increase of a Class 1 property’s assessed value to 6% per year or 20% over five years except in the case of physical improvements. This is a disincentive to the creation of basement and cellar apartments, particularly when these units are expected to be a below-market rental product. Without an abatement equal to the increase in property taxes, there is little economic rationale for pursuing a conversion.

Ref:

- NYS Real Property Tax Law §1805

11. Expand Non-Metallic Piping Options For Sprinkler Systems

Traditional metallic sprinkler systems are costly to retrofit and can reduce ceiling height. Sprinkler system requirements are described by New York City's Building Code which references the 2007 edition of NFPA13, the country's national fire protection standards (newer editions have been published in 2010, 2013, 2016, and 2019). The 2007 edition explicitly lists one non-metallic piping option for residential use, CPVC. NFPA13D, the standard for one- and two-family homes, added PEX piping to approved non-metallic piping options in its 2010 edition. PEX is a flexible plastic piping system that is much less costly and faster to install than its metallic counterpart. While nothing in the code expressly prohibits PEX or alternative non-metallic piping, it has not been widely accepted or used within DOB's jurisdiction.

Ref:

- 2014 NYC Building Code Appendix Q
- NFPA13 2007 ed.

12. Embrace Water Mist Sprinkler Systems For Residential Applications

Water mist sprinkler systems are comprised of a water supply, a pressure source, and distribution piping system equipped. Conveniently, the water supply can be pulled from a line or a dedicated tank, which is an effective solution when protecting a small space. Some water mist systems embed the nozzles into the walls, avoiding a penalty on ceiling height which tends to be a concern in subgrade units. Mist systems atomize water into a fine mist that displaces oxygen efficiently extinguishing a fire and substantially reduce water use.

New York City's building and fire codes consider water mist sprinklers "alternate automatic fire-extinguishing systems" that are often required by the Department of Buildings to submit comprehensive technical justification and to undergo additional testing. The onerous approval process and the variable complexity of the system can make water mist solutions costly. While these systems are greener and cause less damage, they remain a niche installation found most often in commercial applications and where water damage is a concern like data centers or historic landmarks.

Ref:

- 2014 NYC Building Code §904.12
- 2014 NYC Fire Code §904.12

13. Create An Amnesty Program For Work That Had Been Previously Done On A Subgrade Unit Without A Permit

Homeowners who have undertaken construction work in their basements or cellars that was not permitted through the Department of Buildings may have more interest or incentive to legalize a secondary apartment, but may not ultimately pursue legalization for fear of inviting government scrutiny of the property. Section 6 of the enabling legislation for the pilot program allowed the Department of Buildings to defer or waive civil penalties that would preclude an application from participating in the program. This provision would help in circumstances where the homeowner has open violations, particularly if they could be resolved through the basement conversion work. If a homeowner does not have open violations, the additional government scrutiny could result in new or additional fines.

Ref:

- Local Law 49 of 2019

Potential Reform Jurisdiction

	Reform Action	Jurisdiction			
		NYS Legislature ¹	City Council ²	ULURP ³	Agency
BACPP ⁴	Allow cellar occupancy		●		
	Permit 7'-0" ceilings		●		
	Create a DOB and BSA point of contact				●
	Allow the issuance of a partial certificate of occupancy or amended certificate of occupancy limited to the extent of the basement or cellar conversion work		●		
	Regulate glazed area in aggregate rather than by window	●	●		
	Abate property taxes to offset increase due to conversion	●			
	Exclude cellars from FAR when converted into a dwelling unit		●	●	
	Consider a two-family dwelling with a subgrade apartment a private dwelling rather than a multiple dwelling	●	●		
	Exempt new multiple dwellings from 'adequate adjacent space' requirements when converting from a two-family to a three-family	●	●		
	Waive parking requirements for a subgrade apartment		●	●	
	Embrace water mist sprinkler systems in residential applications				●
	Expand non-metallic piping options for sprinkler systems				●
Create a civil penalty amnesty program for basement or cellar conversion work done without a permit on R-3 dwellings		●			

NOTES:

1. The New York State Legislature can amend the state's Real Property Tax Law and can modify the construction requirements of multiple dwellings through the Multiple Dwelling Law.
2. The Housing Maintenance Code and the Building Code are governed by the New York City Council, which can amend the text on an ad hoc basis or per the recommendations of the Department of Buildings Construction Code Revision Cycle Managing Committee. The Mayor and City Council can introduce legislation modifying the text of the codes typically following technical review by the Department of Buildings and legal review by the Council and the Mayor.
3. The Zoning Resolution maps may be amended through the ULURP process which requires public review, CPC review and approval, and adoption by the City Council. Zoning Resolution text amendments go through a similar process but are referred informally to community boards for review rather than going through the time-limited ULURP process.
4. 'BACPP' refers to the Basement Apartment Conversion Pilot Program launched in East New York and Cypress Hills. The relief measures noted in the table next to 'BACPP' were incorporated into the pilot through 2019 Local Law 49.