

Resilience Zoning Mechanisms
Jim Newman, Linnean Solutions

Residential Apartment Commercial zoning – Toronto, CA

<https://www.toronto.ca/community-people/community-partners/apartment-building-operators/residential-apartment-commercial-zoning/>

From the resource:

“Residential Apartment Commercial (RAC) zoning allows small-scale non-residential uses, such as food markets, shops, small business, classes, community facilities and other initiatives, on more than 400 apartment buildings sites that were previously residential-only. [Toronto City Council adopted the bylaw](#) in 2013 and the Ontario Municipal Board approved the new zone in 2016.

Allowing for a wider range of uses in apartment tower neighbourhoods has a number of benefits, such as:

- convenient and walkable access to local shops, services and amenities for residents.
- opportunities to engage in small-scale enterprises for residents and the community.
- new service offerings to current and potential residents and a new potential revenue stream for property owners.
- more animated, safer and inviting places for everyone!

The Tower Renewal Program is supporting property owners, community groups, residents and others interested in implementing projects using the new RAC zone. If you have any questions about the zone, partnerships and implementation, email us at tower@toronto.ca.”

Zoning for Flood Resiliency – New York City, NY

<https://www1.nyc.gov/site/planning/plans/flood-resilience-zoning-text-update/flood-resilience-zoning-text-update.page>

From the resource (two-page summary of flood text saved on server):

“The Flood Resilience Zoning Text (the “Flood Text”) is one part of a wide range of efforts by the City to recover from Hurricane Sandy, promote rebuilding, and increase the city’s resilience to climate-related events, including coastal flooding and storm surge.

The Flood Text encourages flood-resilient building construction throughout designated floodplains by removing regulatory barriers that hinder or prevent the reconstruction of storm-damaged properties. It also enables new and existing buildings to comply with new, higher flood elevations issued by the Federal Emergency Management Agency (FEMA), and to comply with new requirements in the New York City Building Code (“Building Code”).”

Norfolk Zoning Ordinance Rewrite – Norfolk, VA

<https://www.norfolk.gov/DocumentCenter/View/35581>

From the resource:

“The City of Norfolk, Virginia adopted a new zoning ordinance to enhance flood resilience and direct new more intense development to higher ground; the ordinance was adopted on January 23, 2018 and became effective on March 1, 2018. The ordinance establishes a Coastal Resilience Overlay (CRO) zone, where new development and redevelopment will have to comply with new flood resilience requirements, and an Upland Resilience Overlay (URO), designed to encourage new development in areas of the city with lower risk of flooding.

The zoning ordinances includes the following innovative practices for fostering more flood resilient urban development:

- **Freeboard** - The ordinance requires that construction in the 100-year floodplain be elevated at least 3 feet above the 100-year base flood elevation, and construction in the 500-year (0.2% chance) floodplain, to be elevated or floodproofed to 1.5 feet above the 500-year flood elevation.
- **Coastal Resilience Overlay** - In the CRO zone, additional requirements include the use of permeable surfaces on new parking spaces and stormwater infiltration requirements.
- **Upland Resilience Overlay** - In an URO zone, applied to areas outside of flood hazard zones, the ordinance includes policies aimed to target redevelopment to create transit-oriented, walkable, and bikeable neighborhoods.
- **Resilience Quotient System** - The ordinance also adds a new resilience quotient system, where developers earn points for adopting different resilient measures that promote flood risk reduction, stormwater management, and energy resilience, among other practices. New developments are required to meet different resilience point values based on the development type (e.g., residential, non-residential, mixed-use) and development size, unless the developer opts to meet specified standards for elevation and drainage... “

Planning and Zoning for Resiliency – Hartford, CT

<https://aap.cornell.edu/news-events/sara-bronin-planning-and-zoning-resiliency-hartford-example>

From the resource:

“Once the richest city in the country, Hartford has become a textbook example of urban disinvestment in post-industrial America. Despite its difficulties, Hartford is positioning itself as a model for urban sustainability and environmental stewardship through progressive planning and zoning initiatives. With the implementation of an innovative form-based zoning code, the City of Hartford is seeking to boost economic growth while preserving historic character, encouraging smart growth, and promoting public health and sustainability. Additionally, the city has built on the momentum of its zoning overhaul by convening a group of local stakeholders as the Hartford Climate Stewardship Council and adopting Hartford's first-ever Climate Action Plan.”

See article for more specifics of zoning code:

<https://greencitiesbluewaters.wordpress.com/2016/02/16/hartfords-new-zoning-code-an-environmental-win/>

Byblos Zoning Plan to Regulate Urban Sprawl – Byblos, Lebanon

http://www.100resilientcities.org/wp-content/uploads/2017/07/Byblos-ResStrat_Eng_Onlineversion.compressed.pdf

From the resource:

“Preparing a municipal zoning plan to regulate and limit urban sprawl and unplanned building developments, and protect the surrounding environment. Areas with special cultural and environmental importance such as the river corridor, the archaeological sites, and the railway corridor should be given special status, together with areas suitable for increased density of development. Alignment with the proposed mobility plan for the city to redirect urban sprawl and growth is crucial.”