

ZONING FOR RESILIENCY IN HARTFORD, CT

IMLA ANNUAL CONFERENCE + OCTOBER 15, 2017

The International Municipal Lawyers Association-- Niagara Falls, Ontario, Canada
October 14-18, 2017

Meet Hartford



- 18 square miles, 125,000 people
- Difficult budget problems & income/social inequality
- But we've got advantages too…

Vibrant Downtown





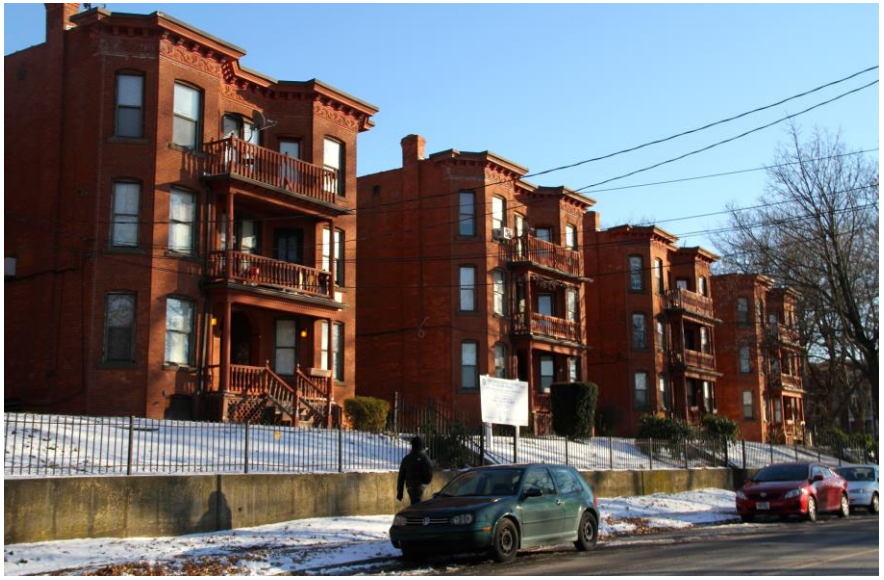


Compact, Walkable Neighborhoods









Historic Character









Access to Transit & Biking









Amazing Natural Assets









Why We Updated Zoning Code

- Our old zoning code:
  - Was overly complex and outdated
  - Placed too many administrative burdens on both applicants and the city
  - **Failed to promote environmental sustainability and resiliency**
- **The move to a form-based code:**
  - Preserved historic character
  - **Promoted smart growth development**

Why Focus on Resiliency?

- CT has warmed twice as much as the rest of the contiguous 48 states, resulting in:
  - Warmer, wetter winters
  - Hotter, drier summers
  - Extreme flooding events
- Low-income residents are most threatened





Why Focus on Resiliency?

- As defined by the Intergovernmental Panel on Climate Change (IPCC), ***resiliency*** is "any capacity and skills, and action, strategy, investment and anticipation, which helps individuals, households, and communities anticipate, absorb, accommodate, or recover from the impacts of a particular adverse event (shock, stress, or (un)expected changes)."

Areas of Focus

- Energy
- **Food**
- **Landscape**
- **Transportation**
- **Waste**
- **Water**

Process

- 2 years long
- **Neighborhood plans + City plan**
- **Zoning advisory committee**
- **Lots of meetings and focus groups**





Energy

- Cleaner, cheaper, and more reliable energy that reduces the likelihood of power outages during storms, creates green jobs, reduces fossil fuel dependence, and cuts energy costs for all.

Energy





- Provides height bonuses for downtown/TOD buildings if:
  - Renewable energy meets 25% of building need or
  - Cogeneration is used
- Allows:
  - Building-mounted solar/wind everywhere
  - Freestanding, large-scale wind along highways
  - Solar parking canopies in most lots

Energy





- Requires EV charging stations for 35+ car lots
- Provides parking credits for renewable/energy efficient parking facilities*
- Prohibits new trees from shading solar collectors.

Food

- Nutritious food that is locally grown or non-carbon-intensive, and is readily available across all neighborhoods, leading to improved health and greater resiliency for area families.

Food





- Urban agriculture, which encompasses community gardens, urban farms (including hens and bees), and farmers' markets, explicitly allowed with reasonable conditions

Food

- Regulations require convenience stores to dedicate at least 20% of net floor area to selling “real” food such as fresh fruits, vegetables, whole grains, whole grain cereal, dairy products (excluding ice cream), and canned or dried goods without unhealthy additives





Landscape

- Private and public landscapes filled with trees and meadows that together mitigate the effect of high heat days and flooding, provide ecosystem services, offer recreation, and clean our air.

Landscape



- Specifies canopy coverage requirements for all uses
- Articulates installation, maintenance, and removal standards (inc. biodiversity)

Landscape



- Requires native plants and eliminating invasive species
- Provides density bonuses for green roofs in downtown and in the transit-oriented development district

Transportation

- A multi-modal, affordable transportation network with safe biking and walking options and fewer vehicle-related emissions, which improves air quality and cuts asthma rates.

Transportation





- Embraces "Complete Streets" approach requiring street profiles that address multiple modes of travel (walking, biking, public transit, and driving)
- Addresses sidewalks, buffer areas, parking lanes, traffic lanes, bike lanes, and medians
- Aims for "Vision Zero" principles

Transportation

- Eliminates car parking requirements for new buildings downtown and for retail & service uses
- Further reduces required parking with parking credits
- Allows fewer auto uses (car washes, gas stations, auto repair)

7.0 PARKING

USES	REQUIRED NUMBER OF OFF-STREET PARKING SPACES
Residential & Lodging Uses	
One-Unit Dwelling/Group Living for Health Reasons	Minimum 1 space, maximum 4 spaces per zoning lot For One-Unit Dwelling Building in N-1-1, maximum 6 spaces per zoning lot
2- & 3- Unit Dwelling	Minimum .5 space, maximum 2 spaces per unit
Multi-Unit Dwelling (4+ Dwelling Units)	Minimum 1 spaces, maximum 3 spaces per unit
Micro/Efficiency Units	Maximum 2 spaces per unit
Bed & Breakfast, Hotel/ Apartment Hotel	Minimum 1 space, maximum 2 spaces per 2 guest rooms
Temporary Shelter Facility	Minimum 1 space per 2 employees
Group Living	Minimum 1 space, maximum 1.5 spaces per adult resident. For foster homes and children's homes: minimum 1 space, maximum 2 spaces per 4 children residents
Residential Care, Large	Minimum 1 space, maximum 4 spaces for every 4 beds (excluding bassinets)
Residential Care, Small	Minimum 1 space, maximum 2 spaces per resident
Roominghouse/ Boardinghouse	Minimum .5 space, maximum 1 space per rooming unit; plus minimum .5 space, maximum 1.5 spaces per dwelling unit of owner or manager
Civic & Institutional Uses	
Hospital	Minimum 1 space, maximum 4 spaces for every 4 beds (excluding bassinets)
Library/Museum	None
All Other Civic & Institutional Uses	In accordance with special permit review
Open Space Uses	
Park	In accordance with special permit review
Urban Farm	In accordance with special permit review
Retail Uses	
Outdoor Sales Lot for Vehicles	1 space for each unregistered vehicle permitted to be sold, plus 1 additional space per minimum 10, maximum 5 such vehicles, reserved for visitors/ employees
All Other Retail Uses	Maximum 3 spaces per 1,000 square feet net floor area devoted to retail space
Service Uses	
Automobile Fueling & Limited Service, Automobile Service/Car Wash, Drinking Places, Entertainment Assembly, & Smoking Places	In accordance with special permit review
Eating Places	Maximum 3 spaces for every 5 persons based on maximum capacity
All Other Service Uses	Maximum 3 spaces per 1,000 square foot of net floor area devoted to customer service
Adult Uses	
Adult Establishment	Minimum 1 space, maximum 3 spaces per 600 square feet net floor area devoted to retail space; OR for assembly-type uses: minimum 1 space for every 4 persons based on maximum capacity
Employment Uses	
All Employment Uses	Minimum 1 space, maximum 4 spaces per 1,000 square feet
Infrastructure Uses	
All Infrastructure Uses	In accordance with special permit review
Industrial Uses	
All Industrial & Warehouse Uses	Minimum 1 space per 4 employees, maximum 4 spaces per 4 employees

Notes:
These off-street automobile parking requirements shall not be applied to zoning lots in the DT-1, DT-2, and DT-3 districts.

Where special permit review is required for particular projects, these off-street automobile parking requirements shall be used as guidance but are not binding.

Figure 7.2-A Required Off-Street Automobile Parking

Transport. - Bikes

- … But we do ask developers to put up bike racks

(4) **Required Quantity of Showers and Changing Facilities.** For new office uses, retail uses, hospital and hospital-related uses, colleges, and universities, one shower and changing facility shall be provided for every full-time occupant, up to 0.5 percent of full-time occupants. For example, a site with 100 employees must provide one shower and changing facility (using the rounding rules set forth in 7.2.2.E.(2)); a site with 1,000 employees must provide 5 shower and changing facilities.

BICYCLE PARKING

Use	Minimum Long-Term Bicycle Spaces	Minimum Short-Term Bicycle Spaces
One-Unit Dwellings, 2- Unit Dwellings 3-Unit Dwellings	No minimum requirement	No minimum requirement
Bed & Breakfast, Hotel/Apartment Hotel	1 per every 60 sleeping rooms	1 per every 30 sleeping rooms, with 4 minimum
All Other Residential Uses	1 per every 30 dwelling units, rooming units, or beds, as applicable	1 per every 15 dwelling units, rooming units, or beds, as applicable, with 4 minimum
Assembly Use & Stadium/Arena	1 per every 500 seats	1 per every 50 seats
Higher Education Facility	1 per every 15,000 square feet of building area	1 per every 5,000 square feet of building area
Transit Station	30 spaces within a .125-mile radius	100 spaces
All Other Civic & Institutional Uses	1 per 15 employees	1 per every 10,000 square feet, with 10 minimum
Parks & Urban Farms	1 per every 15,000 square feet, with 15 minimum	1 per every 15,000 square feet, with 15 minimum
Retail & Service Uses	No minimum requirement	1 per every 3,000 square feet
Office/ Employment Uses	1 per 15 employees	1 per every 10,000 square feet
Commercial parking lots and garages	1 per every 30 automobile parking spaces	1 per every 15 automobile parking spaces

Transportation - Parking Credits

7.2.4 PARKING CREDITS

Vehicular parking standards in Figure 7.2-A Required Off-Street Automobile Parking may be reduced by achieving one or all of the following credits, provided, however, that if any conditions or agreements required by this section are no longer available or in force, then parking must be provided as otherwise required in this chapter.

A. Bicycle Parking Credit. For all uses, the provision of bicycle parking over and above the requirements of Figure 7.2-B Bicycle Parking may be credited against the vehicular parking requirement at a rate of one credit for every 5 bicycle parking spaces.

(1) No fee shall be required for the bicycle parking subject to the credit.

(2) Required parking spaces may be reduced up to 15 percent.

B. Sustainably Designed Parking Facility Credit. In parking garages or parking lots where over 50 percent of the lot is covered by freestanding solar energy systems (permitted per 4.20.6.B.), the required vehicular parking spaces may be reduced by 15 percent if the applicant achieves 2 of the following measures or 30 percent if the applicant achieves 4 of the following measures:

(1) Applies only low- or no-volatile organic compound coatings to all surfaces and utilizes either an open-air design with no ventilation system in the parking areas or ventilates the decks with variable controlled air flow or sensor-activated technology.

(2) Has a green roof (vegetation) or blue roof (retains water).

(3) Generates more than a de minimis amount of renewable energy through use of solar panels or wind turbines.

(4) Uses exclusively energy-efficient lighting fixtures, as well as lighting controls such as timers, photo sensors, or occupancy sensors.

C. Transit Credit. For all uses, vehicular parking requirements may be reduced with proximity to any transit station as defined in 3.3.2.H. or bus stop served by 2 or more public bus service routes with frequencies every 20 minutes or less. Proximity is measured from any point along the property line to the transit station or bus stop, subject to this section.

(1) Within 1,000 feet of a transit station, a reduction of 50 percent of the required off-street parking.

(2) Within 1,000 feet of a bus stop subject to this section or 2,000 feet of a transit station, a reduction of 20 percent of the required off-street parking.

(3) Within 2,000 feet of a bus stop subject to this section, a reduction of 10 percent of the required off-street parking.

D. Car-Share Parking Credit. For all uses, the vehicular parking requirements may be reduced by designating parking spaces as car-share parking spaces or if an off-site car-share parking facility is located within 800 feet of the site. Car-share parking spaces are defined as spaces that house vehicles owned by a car-share company which can be directly accessed by drivers without the need for a customer service counter, and thus a distinct use from an automobile rental service.

(1) Per each car-share parking space provided, required parking spaces shall be reduced by 4 spaces.

(2) Required parking spaces may be reduced up to 40 percent.

(3) Approval. Applicant must provide documentation of an agreement with a car-share company, providing services to building tenants. If this agreement should terminate at any point, the applicant shall be required to provide parking as otherwise required herein.

E. Transportation Management Reductions. For all uses, when an applicant submits a transportation management plan, the required automobile parking spaces may be reduced by 15 percent if the applicant achieves 2 of the following measures, or 30 percent if the applicant achieves 4 of the following measures:

(1) Ensure that 10 percent of employees participate in a regional ride matching system.

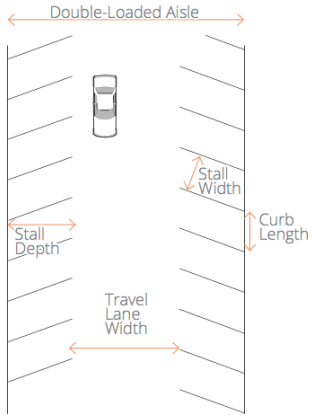
(2) Institute a monthly, market-rate parking charge for all off-street parking, without permitting such charge to be employer-subsidized, with a discount for vehicles containing 3 or more persons.

(3) Provide a vanpool or subscription bus service for at least 10 percent of employees.

(4) Provide subsidized transit passes for 10 percent of employees.

(5) Subsidize at least 25 percent of costs for employee use of high-occupancy motor vehicles such as carpools and vanpools, if there are no parking charges.

(6) Prove that at least 10 percent of employees will walk or bike to work.



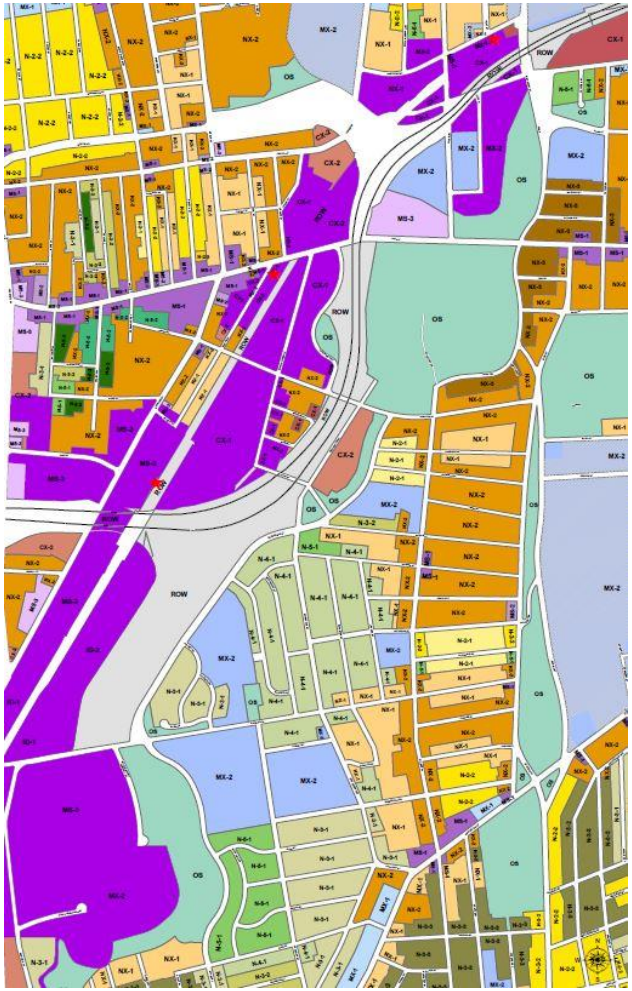
MINIMUM PARKING SPACE DIMENSIONS[1]

Angle	Curb Length	Stall Width	Stall Depth	Travel Lane Width	
				One-Way	Two-Way
0 degrees	18 feet	8 feet	18 feet	12 feet	24 feet
45 degrees	12 feet	8.5 feet	17 feet	12 feet	24 feet
60 degrees	10 feet	8.5 feet	18 feet	18 feet	24 feet
90 degrees	8.5 feet	8.5 feet	18 feet[2]	24 feet	24 feet

[1] Maximum dimensions shall not exceed 10 percent of the minimum dimensions.
[2] Stall depth may be reduced 2' when stall directly abuts an interior parking lot median that includes an additional area beyond the minimum width, permitting the overhang of the adjacent parked vehicle's front bumper.

Figure 7.3-A Parking Space Dimensions.

Transportation - TOD Overlay District



- Along the CTfastrak bus rapid transit system
- Now: mostly 1-story & parking lots
- New zoning:
  - Minimum 3.5 stories
  - Up to 8 stories + 6 stories in bonuses
  - Parking credits of 50%
  - Any uses allowed downtown

Transportation - TOD Overlay District

- Downtown Storefront, Downtown General, Apartment, and Row Building

4.3 Downtown Storefront Building Type

4.3.1 DESCRIPTION & INTENT

The Downtown Storefront Building is a mid-rise or high-rise building permitted in the downtown core and along Main Street south of downtown. This building type is required in certain locations in the downtown.

Like the Storefront Building Type, the key facade element of Downtown Storefront Buildings is the storefront required on the ground floor front facade, with large amounts of glass and regularly spaced entrances. Parking is provided in parking structures to maximize the building footprint and density.







4.4 Downtown General Building Type

4.4.1 DESCRIPTION & INTENT

The Downtown General Building Type is a mid-rise or high-rise building located in Hartford's commercial core that generally accommodates office and/or residential uses, including on the ground floor. Facade requirements and a front entrance location make this a pedestrian-friendly building face suitable for secondary and urban neighborhood streets, rather than shopping districts.

It is typically sited with zero-lot lines, with facades meeting the back of the sidewalk, or facing a courtyard along a Primary or a Secondary Street face. Parking is provided in parking structures to maximize the building footprint and density.







4.11 Apartment Building Type

4.11.1 DESCRIPTION & INTENT

The Apartment Building is designed to house multiple residential units within multi-unit districts throughout the city.

The Apartment Building includes a landscaped front yard and a front primary entrance, which contributes to a pedestrian-friendly neighborhood.









4.13 Row Building Type

4.13.1 DESCRIPTION & INTENT

The Row Building is a building typically comprised of multiple vertical units, each with its own entrance to the street. This building type may be organized as townhouses or rowhouses, or can be utilized for live/work units when non-residential uses are permitted.

Parking is required to be located in the rear yard and may be incorporated either into a detached garage or in an attached garaged accessed from the rear of the building. However, when the garage is located within the building, a minimum level of occupied space is required on the front facade to ensure that the street facade is active.





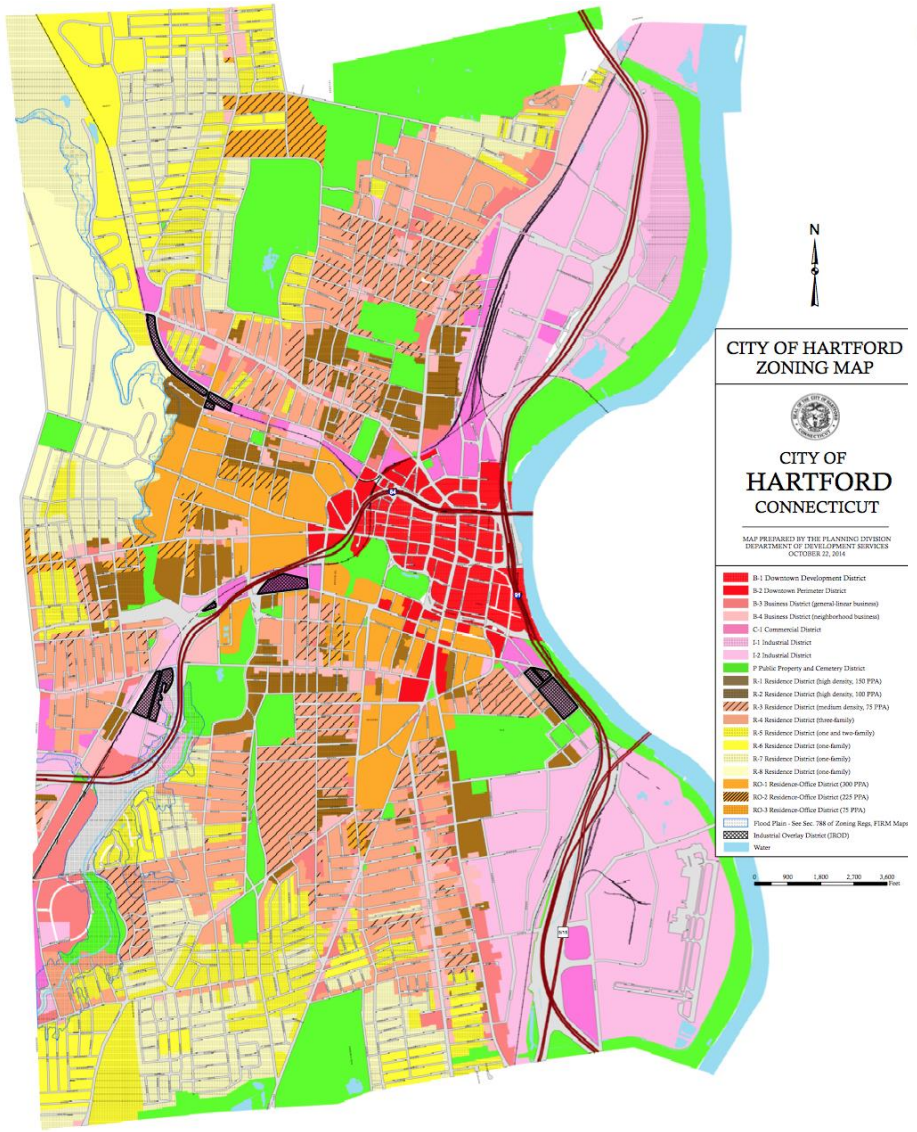




Waste

- Eradication of the worst trash and blight, and public education that boosts diversion, recycling and reuse rates—which in turn cuts costs, related emissions, and environmental degradation.

Waste (Uses)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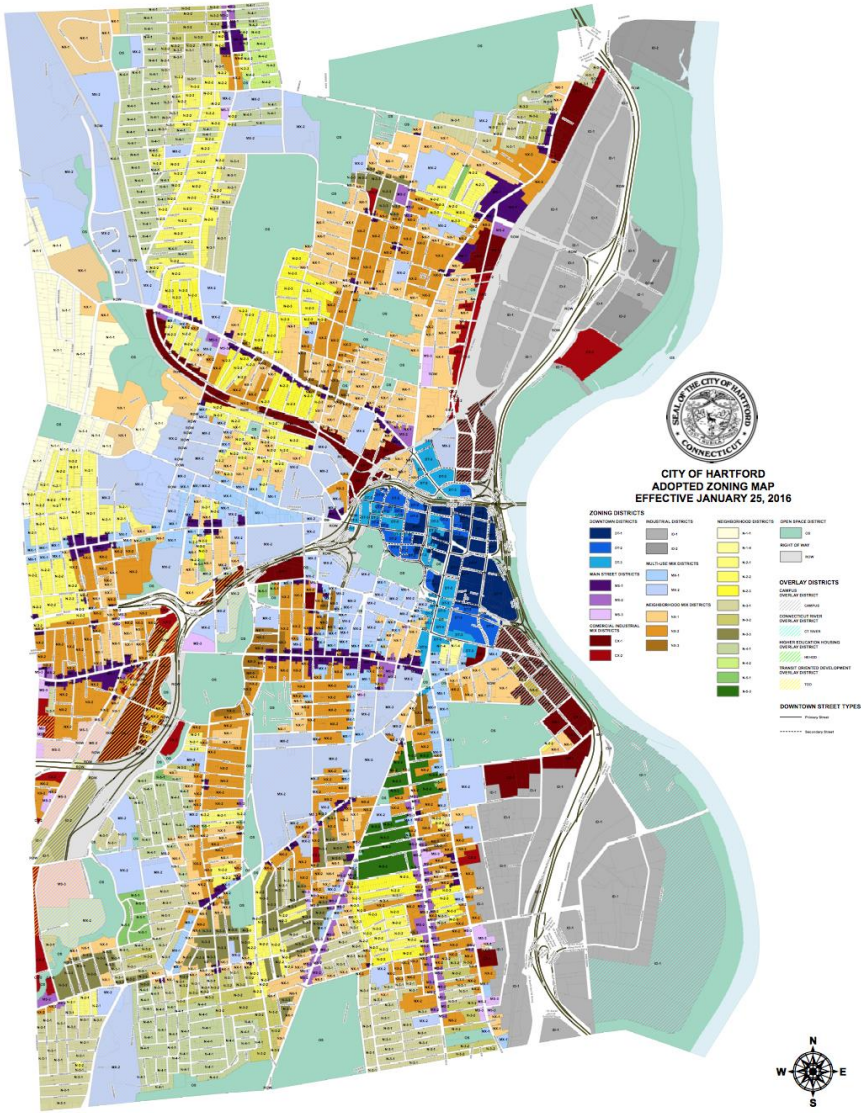
CITY OF HARTFORD
ZONING MAP
CITY OF
HARTFORD
CONNECTICUT
MAP PREPARED BY THE PLANNING DIVISION
DEPARTMENT OF DEVELOPMENT SERVICES
OCTOBER 22, 2014
B-1 Downtown Development District
B-2 Downtown Perimeter District
B-3 Business District (general-linear business)
B-4 Business District (neighborhood business)
C-1 Commercial District
I-1 Industrial District
I-2 Industrial District
P Public Property and Cemetery District
R-1 Residence District (high density, 150 PPA)
R-2 Residence District (high density, 100 PPA)
R-3 Residence District (medium density, 75 PPA)
R-4 Residence District (three-family)
R-5 Residence District (one and two-family)
R-6 Residence District (one-family)
R-7 Residence District (one-family)
R-8 Residence District (one-family)
RO-1 Residence-Office District (300 PPA)
RO-2 Residence-Office District (225 PPA)
RO-3 Residence-Office District (75 PPA)
Flood Plain - See Sec. 788 of Zoning Regs, FIRM Maps
Industrial Overlay District (IROD)
Water
0
900
1,800
2,700
3,600
Feet


CITY OF HARTFORD
ADOPTED ZONING MAP
EFFECTIVE JANUARY 25, 2016
ZONING DISTRICTS
OVERLAY DISTRICTS
DOWNTOWN STREET TYPES
N
W
E
S

Waste





- Provides for composting facilities in any zoning district
- Bans new sanitary landfills, fracking waste, and scrapyards

Water

- More efficient use of potable water, better protection against floods and droughts, and waterways made cleaner through green infrastructure that reduces and cleans stormwater runoff.

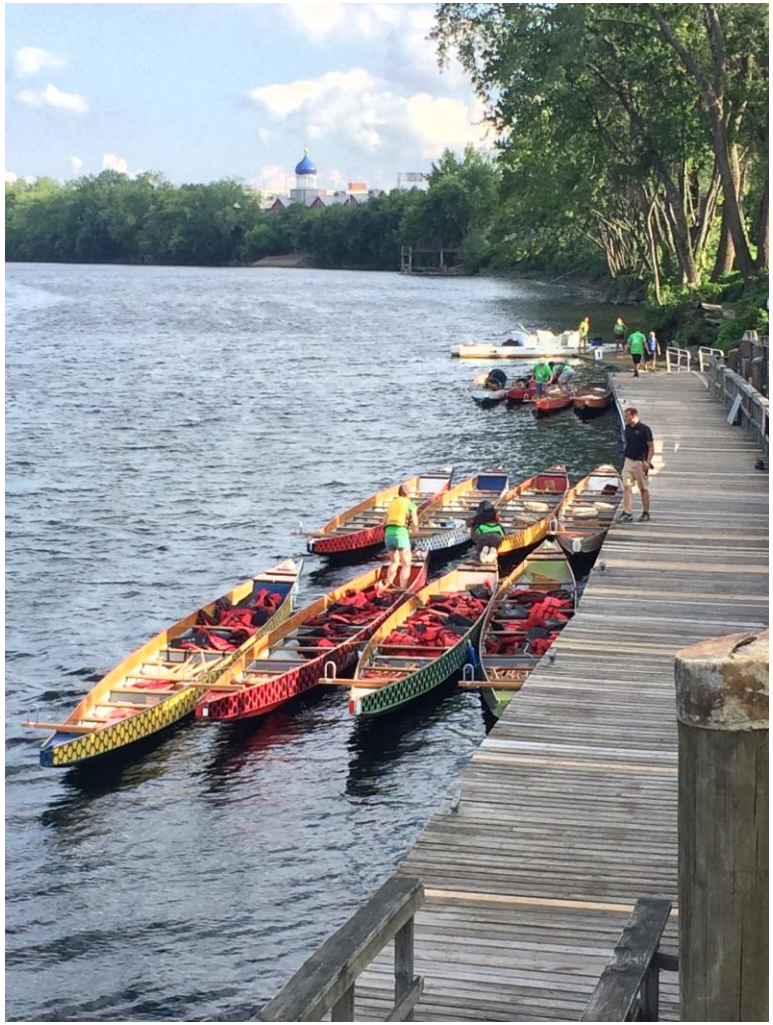
Water

- Institutes 25 to 50 foot "development-free" buffers near waterways
- Prioritizes low impact development and green infrastructure
- Limits impervious coverage (and thus stormwater runoff) on every lot



Water

- Creates a Connecticut River Overlay that moves industrial uses away from the largest water body and incentivizes mixed-use development there
- Bans artificial turf made of synthetic infill (one of first codes to do so)



Lots of Awards

CRCOG
CAPITOL REGION
COUNCIL OF GOVERNMENTS

Connecticut Conference
of Municipalities

Connecticut
Economic
Resource Center
Collaboration at Work



SOLSMART
GOLD



APA
CT

CNU
NEW
ENGLAND

The
Urbanism
Awards

… & Now Climate Action Plan

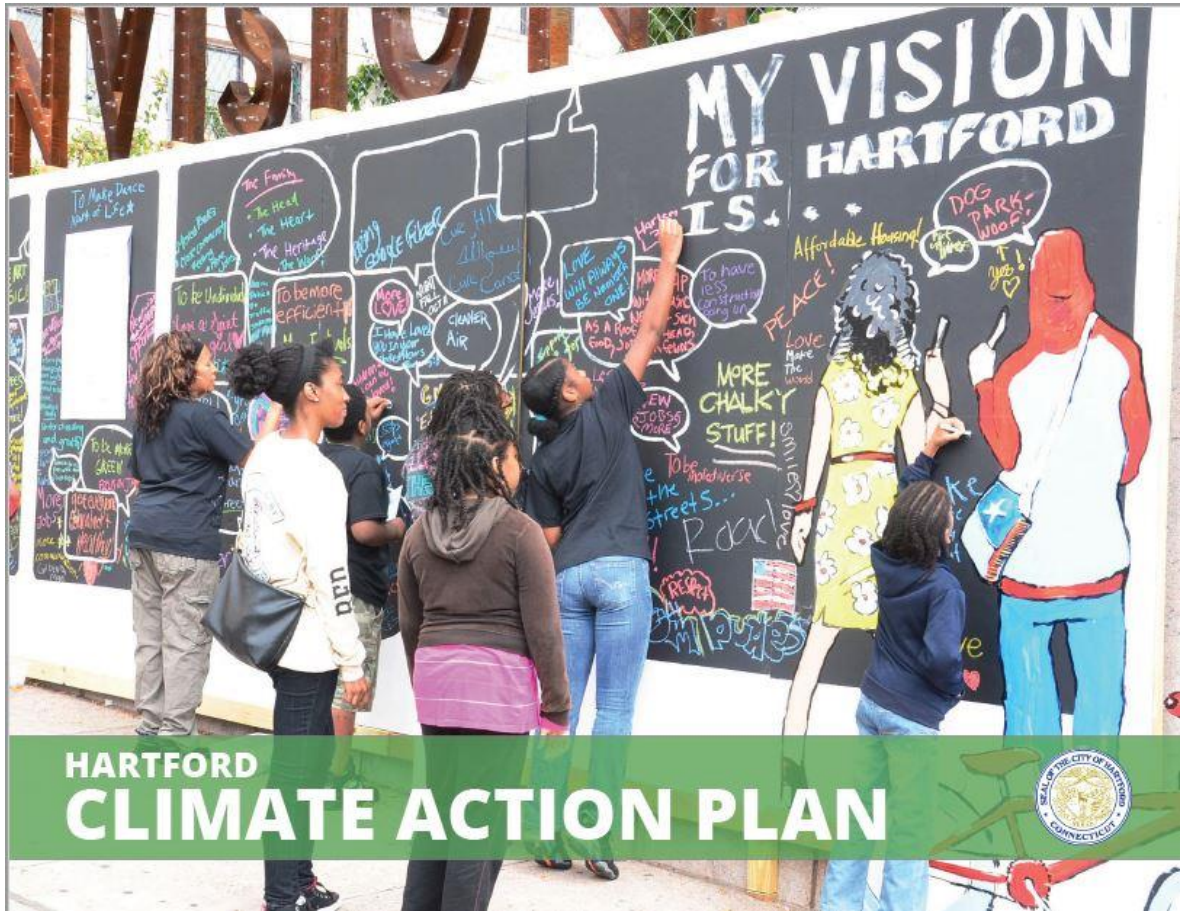








Climate Action Plan



- Mission: We aim to advance the city's **economy**, improve **public health** and quality of life, and promote **social equity** while becoming a global leader in environmental stewardship.

Thank You!

Sara Bronin
Thomas F. Gallivan Chair in Real Property Law, UConn Law School
Chair, City of Hartford Planning & Zoning Commission
sara.bronin@uconn.edu

Zoning Code: www.hartford.gov/dds
Climate Work: www.hartford.gov/climate