Rezoning the Post-Industrial City: Hartford

Sara C Bronin
Overgrown with weeds, the M. Swift & Sons Factory sits in the heart of the North End neighborhood, a vacant, hulking reminder of the industrial heritage of Hartford, Connecticut. The humming machines that once manufactured gold leaf are gone—as are the skilled workers, paid good wages, who lived in the surrounding houses.

Despite the decay, any passerby can see that the bones of the building are magnificent; in fact, the entire complex is listed on the National Register of Historic Places. Like many buildings in post-industrial American cities, the Swift Factory deserves new life. And—thanks in part to a pioneering, sustainability-focused zoning code recently passed by Hartford—it will soon get one.

The Textbook Post-Industrial City

Once the richest city in the country, Hartford has become a textbook example of the disinvestment of post-industrial America. The vast majority of the 81 historic industrial complexes that were built in the early 20th century, including the Swift Factory, have been shuttered. As the Northeast region shifted from an industrial to a service economy in the 1950s, the flight of the middle class to the suburbs accelerated. Today, more than half of the property within Hartford city limits is nontaxable (owned by government or nonprofits), thus limiting revenue generation and restricting the ability of city government to allocate resources for its needy population. Confined to 18 square miles within a metropolitan region where the tradition of municipal home rule runs deep, Hartford cannot use annexation—a strategy used by many newer, Western cities (such as Houston and Phoenix)—to grow its tax base.

Nowhere are the effects of this disinvestment more obvious than on Love Lane, where the long-closed Swift Factory sits. Today, unemployment rates in the immediate neighborhood, which is largely African-American, exceed rates during the Great Depression, and per...
capita income was recently measured at $12,099 (as opposed to $37,726 for the rest of Connecticut). See U.S. Dep’t of Hous. & Urban Dev., North Hartford Promise Zone (2015), at https://perma.cc/QP6H-P3ZE. In 2015, the neighborhood became part of a federally designated Promise Zone, an area of high poverty but high opportunity. Hartford, Conn., North Hartford Promise Zone, https://perma.cc/8C7M-65E8.

Despite these issues, Hartford has retained 15 charming historic residential neighborhoods, which together reportedly represent the highest number of historic buildings per capita of any city in the country. It has an increasingly vibrant downtown, driven by an influx of new housing units (nearly 1,000 in the last few years), constructed with the financial support of a state agency devoted to stimulating economic development. And it has a stunning array of natural assets, including the nation’s oldest public park, the largest municipal forest in New England, and the first National Blueway, the Connecticut River.

The story of the Swift Factory—indeed, the story of Hartford—is echoed in post-industrial city after post-industrial city across America. How can such cities realize their promise and make their neighborhoods better places to live in the process?

Zoning Reform as Economic Development

The most common strategies for long-term economic development have been described many times: tax reform, regionalization, brownfield redevelopment, and the like. These strategies are actively being pursued by Hartford’s political leadership, including the new mayor (who is the author’s husband).

But true, comprehensive zoning reform is perhaps an understudied mechanism for catalyzing economic development. Often, changes to a city’s zoning code are done piecemeal, either to address specific projects or new trends (such as Airbnb). Instead of a piecemeal approach, Hartford decided a few years ago to completely overhaul its 50-year-old zoning regulations.

Hartford’s Planning & Zoning Commission chose to undertake a comprehensive overhaul for many different reasons, but the three key reasons were (1) that the code was out-dated, failing to accommodate modern preferences, (2) that it placed too many administrative burdens on applicants and on the city, and (3) that it failed to promote environmental sustainability, which every level of government must tackle in the era of man-made climate change. It is very likely that anyone could say one or all of these things about their own town’s zoning code. Most zoning codes have not been comprehensively updated since the turn of the millennium, which has seen rapid shifts in real estate trends on the residential and commercial sides. Moreover, most zoning codes are highly complex and difficult to understand and administer. Finally, few codes explicitly embrace best practices that our climate crisis requires, because the framework of a traditional zoning code does not anticipate incorporation of such practices.

Recognizing these deficiencies, the Commission chose to replace Hartford’s old code with a streamlined, form-based code that has environmental sustainability at its core. As chair of the Commission, the author was privileged to lead this process, in coordination with a consultant, Cadometrics, which worked to document and catalogue the city’s architectural styles and lend expertise to the code drafting. In drafting the code, the Commission had significant leeway because the city’s charter granted it full and exclusive authority to adopt the code without political interference. (Connecticut is the only state to allow cities to exclude both mayors and city councils from the zoning process.)

The revisions to the code were guided by four overarching priorities: economic growth, environmental sustainability, access and mobility, and food security. None of these priorities was pursued as aggressively in the prior code, and each reflects

Recognizing Hartford’s place as the economic engine of its region, the zoning code includes several strategies to foster growth.
a new vision for Hartford’s future development. In each of these areas, the Commission benefitted from the research of UConn Law School students enrolled in the author’s classes during the two-year revision process. The author hopes that describing Hartford’s strategies for realizing these priorities through its zoning code will encourage other communities to take the plunge and comprehensively reform outdated zoning codes that hold too many of our cities back.

**Prioritizing Economic Growth**

Recognizing Hartford’s place as the economic engine of its region, the zoning code includes several strategies to foster growth.

First, at the most basic level, the new code reduces the cost of real estate development. The old code was confusing and unclear, and it required too many public hearings for simple projects. The new code provides clear written and graphic direction, removes uncertainty by making most uses and building types “as of right,” and is more flexible (particularly in terms of uses) than the prior code. In addition to wiping away contradictory and cumbersome regulations, the new code eliminates costly parking requirements in many commercial areas, as further described in the “Prioritizing Access and Mobility” section below. The city is hopeful that these cost-reducing measures will inspire confidence in those seeking to invest and develop in Hartford.

Second, the zoning code embraces new models of entrepreneurship and innovation. For example, the code creates a new use category called “Craftsman-Industrial,” which allows “maker spaces” in every nonresidential zone in Hartford and in sites, like the Swift Factory, that create opportunities for new users. The city welcomes the woodworkers, textile makers, cobblers, aquaculture practitioners, and craft beverage makers that are covered by this use category. As another example, the zoning code embraces adaptive reuse of our historic industrial buildings—the kinds of buildings that have become more appealing to start-up entrepreneurs—to be used for offices, residences, or mixed-use spaces. This, too, benefits the owners of the city’s historic mill complexes.

Finally, Hartford has adopted innovative, form-based provisions that envision appealing, mixed-use smart-growth developments that will be compatible with its existing architectural fabric. Id. ch. 4. Form-based codes are a form of land development regulation that focuses on physical form, rather than the separation of uses, as its organizing principle. See Form-Based Codes Inst., Form-Based Codes Defined, http://formbasedcodes.org/definition/ (last visited Feb. 23, 2017). Using this approach, Hartford has designated a large number of parcels for transit-oriented development and created a special, mixed-use zone called the Connecticut River Overlay. Hartford, Conn., Zoning Reg. § 5.4. The city also allows apartment-style living, including micro-efficiency units as small as 300 square feet, in many zones. Id. Fig. 3.2-A. The zoning code encourages the development of affordable housing in downtown and transit-oriented development zones by providing a two-story density bonus if a developer designates 15% of the residential units to be affordable. Id. §§ 4.3.2.E(5)(3) & 4.4.2.E(7)(e).

These kinds of developments are attractive to young professionals and others interested in urban living.

**Prioritizing Environmental Sustainability**

Hartford’s code uses an innovative mix of “carrots” and “sticks” to encourage property owners to prioritize sustainability, carbon footprint reduction, and resilience. The Hartford zoning code’s greatest environmental impact may well be that it uses a form-based approach to zoning that requires more compact, human-scale development than the prior code.

In addition to the form-based rules, Hartford’s new zoning code specifically targets the areas of energy, air, and water.

**Energy**

Connecticut has the highest electric costs in the continental United States, and its building stock tends to be highly energy inefficient because of its age. In response, Hartford’s zoning code now

- allows building-mounted solar/wind everywhere,
- allows freestanding, large-scale wind turbines along the highway corridor,
- allows solar parking canopies in most parking lots,
- requires electric vehicle charging stations for lots of 35 or more cars, creating citywide infrastructure for electric vehicles,
- provides parking credits for renewable-powered and energy efficient parking facilities,
- provides height bonuses for buildings downtown or in the transit-oriented development zone if renewable energy meets 25% of such building’s needs or if co-generation is used, and
- prohibits new trees from shading solar collectors.
Hartford has some of the highest asthma rates in the country, in part caused by transportation sector emissions from two major highways running through dense historic neighborhoods. Hartford’s new zoning code reduces transportation-related emissions by

- establishing transit-oriented development districts,
- instituting parking maximums and reducing/eliminating parking minimums,
- requiring short- and long-term bicycle parking for nearly every new building, and
- requiring new and substantially rehabilitated streets to be redesigned with “Complete Streets” principles, which de-emphasize the primacy of the car and encourage walking and biking.

Hartford, Conn., Zoning Regulations §§ 5.3, 7.2, & ch. 9. The code also enhances the urban canopy, which purifies air and reduces energy costs, by

- specifying canopy coverage requirements (minimum amount of lot covered by trees) for all uses,
- articulating tree installation, maintenance, construction, and removal standards (including biodiversity),
- providing density bonuses for green roofs in downtown and in the transit-oriented development district,
- allowing community gardens and parks everywhere and urban farms nearly everywhere, and
- requiring native plants and eliminating invasive species.

Hartford, Conn., Zoning Regulations §§ 4.3.2.E(5)(a), 4.4.2.E(7)(a), ch. 6 & Fig. 3.2-A.

**Water**

Hartford faces threats to water quality from contaminated stormwater runoff and incompatible land uses along waterways. Hartford’s zoning code

- 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,
- requires tree canopy coverage on all lots, with special requirements for plantings in surface parking lots,
- creates a Connecticut River Overlay that moves industrial uses away from the largest water body and incentivizes mixed-use development there, and
- bans artificial turf made of synthetic infill (one of the first zoning codes to do so).


Since adopting the new code, the Planning & Zoning Commission has created a Climate Stewardship Council, a working group that is dealing specifically with expanding the sustainability components of the code into other areas. See Hartford Climate Stewardship Initiative, https://hartfordclimate.wordpress.com (last visited Feb. 23, 2017).

In addition, Hartford’s new mayor

Hartford’s zoning code advances principles that will improve access and mobility for persons of all abilities, ages, and modes of transportation.

**Prioritizing Access and Mobility**

Hartford’s zoning code advances principles that will improve access and mobility for persons of all abilities, ages, and modes of transportation. Embracing a Complete Streets approach, the code devotes an entire chapter to street design, requiring street profiles that address multiple modes of travel, including walking, biking, taking public transit, and driving. The code addresses all features of the right-of-way, including sidewalks, buffer areas, parking lanes, traffic lanes, bicycle lanes, and medians. It explicitly aims to achieve, to the extent possible by planning and zoning requirements, “Vision Zero” principles, which are intended to eliminate traffic-related fatalities. Hartford, Conn., Zoning Regulations § 9.1.1.H.4.

The strategies the zoning code embraces to encourage a well-balanced transportation system go beyond street design. The code de-emphasizes the use of the automobile by adopting best practices for parking requirements and imposes caps on parking for nearly every type of use. It decreases the amount of parking required and even eliminates parking minimums for most retail and services uses and all zoning lots downtown. The code creates and provides incentives for transit-oriented development, which has parking requirements that are 50% or less of what would otherwise be required. The code also offers generous parking credits, which would allow property owners to avoid building parking for cars. Id. § 7.2.4. It is possible that Hartford will consider going further and eliminate all parking minimum requirements in the near future, following in the footsteps of Buffalo, a struggling, post-industrial city similar to Hartford.

Finally, the use table and the map, when read together, significantly

![Image of Hartford Climate Stewardship Initiative](https://example.com/climate_stewardship_initiative.png)
reduce, and find more appropriate sit- ing for, auto-oriented zoning—gas stations, car washes, auto repair shops, and drive-through establishments. Id. Fig. 3.2-A.

After the zoning code was adopted, the mayor and city council passed city- wide legislation that requires Complete Streets principles to be incorporated into city decisions, mandates a Complete Streets Plan, and identifies a permanent bicycle-pedestrian coor- dinator. According to the National Complete Streets Coalition, Hartford joins Stamford and just 30 other American cities (with more than 100,000 people), including Austin, Seattle, San Francisco, and Philadelphia, to adopt a citywide Complete Streets ordinance.

Prioritizing Food Security
Approximately a quarter of Hartford’s residents live in a neighborhood design- ated a “food desert,” defined by the U.S. Department of Agriculture as a place lacking affordable access to fresh fruits, vegetables, and other healthy whole foods. Residents residing in food deserts face great insecurity in attain- ing healthy foods. The zoning code addresses food security in two ways: explicitly authorizing urban agriculture and requiring that “real food” be sold at convenience stores.

In Hartford, urban agriculture encompasses community gardens, urban farms (including hens and bees), and farmers’ markets. All are now explicitly allowed, with reasonable con- ditions to ensure public health, safety, and welfare. Hartford, Conn., Zoning Regulations §§ 3.3.3.A, 3.3.3.F, 3.7.2 & Fig. 3.2-A. Hartford has about 20 com- munity gardens, serving local residents, in nearly every neighborhood. The old zoning code did not allow commu- nity gardens anywhere, even though so many already existed. The new code allows them to be sited anywhere in the city, legalizing a valuable public asset.

The new zoning code also addresses urban farming for the first time. At least four urban farms have been oper- ating in Hartford for years, but before they were not expressly authorized by the zoning code. Under the new code, urban farms are allowed everywhere except in downtown and in the high- density commercial corridors. Hartford now allows beekeeping anywhere in the city; up to ten colonies can be sited on large lots. Id. § 3.3.3.B. Henhouses also have been legalized, with up to six hens allowed under conditions that make them compatible with neighbors. Id. § 4.20.5.C.

There are seven farmers’ markets in Hartford, and they too are addressed in the new code. Recognizing the value that access to fresh, local food provides to our residents, Hartford now allows farmers’ markets in every zone in the city.

Finally, there is a section in the zoning code that requires that conve- nience stores sell “real” food. Too many Hartford residents must rely on con- vention convenience stores for basic food needs. With input from members of Hartford’s Food Policy Advisory Commission, the Planning & Zoning Commission adopted regulations that require that 20% of the net floor area of any convenience store sell fresh fruits, vegetables, whole grains, whole grain cereal, dairy products (excluding ice cream), and canned or dried goods without unhealthy additives. Id. § 3.3.4.E.

Lessons Learned
All of the innovative provisions described above are easy to find in the new code, available on-line at www. hartford.gov/planning/zoning. What may not be as easy to distill from that web site are some of the lessons we learned during the process. Four come to mind: engaging the community, let- ting data rule, persuading real estate investors to align financial and envi- ronmental goals, and collaborating with institutions of higher learning.

Other cities interested in engaging in comprehensive zoning reform might consider how some of these strategies might help to lay their own ground- work for change.

1. Engage the Community in
   Meaningful Dialogue About
   Zoning Reform
Some communities may be wary of adopting such a radical change to the zoning code. Hartford found that robust community engagement about specific issues faced by individuals and neighborhoods resulted in a sur- prising amount of support. During the two-plus year period, Commission members and staff held more than 100 community and stakeholder meetings, including public hearings, interviews, and focus groups. A dedicated web site for program updates and feedback was created. A 14-member Zoning Advisory Group weighed in at key points.

Given this engagement, the vast majority of the testimony was effec- tively positive, and the code was passed unanimously by the Com- mission in just one night. Other communities looking to conduct sweeping zoning reform could use Hartford’s engagement process as a playbook.

2. Let Data Rule
Many communities are constrained by zoning codes developed in the 20th century that no longer reflect the way we want to live today. Preferences by aging baby boomers and first-career professionals alike have moved away from suburbs and toward a more vibrant urban lifestyle. Hart- ford’s zoning code responded to these demographic shifts, as well as to extensive market data. For exam- ple, the code picked up on the demand for mixed-use neighborhoods and...

Many communities are constrained by zoning codes developed in the 20th century that no longer reflect the way we want to live today.
expressly allows multi-family residential uses in every commercial area. In addition, it modestly expanded the number of unrelated persons who can live together as a household unit, recognizing greater flexibility desired in modern living arrangements.

Similarly, the code authorized accessory dwelling units (such as an apartment over a garage), which not only make better use of large lots but also make the large historic buildings in some neighborhoods more attractive to buyers. The code also recognized the demand for riverfront development, rezoning much of the industrially-zoned land along the Connecticut River to either parkland or high-density, mixed-use development.

Collaborations with local educational institutions helped drafters push the envelope of zoning innovation and should certainly be replicated elsewhere.

3. Persuade Real Estate Investors to Align Sustainability Principles with Financial Incentives

The environmental sustainability provisions of Hartford’s code may also be seen as somewhat radical and difficult to adopt elsewhere. But surprisingly, engaging two of the area’s largest project finance investors actually led to the more robust incorporation of sustainability principles throughout the code.

The Capitol Region Development Authority (CRDA), which has invested nearly $60 million to develop downtown housing, supported carbon footprint reduction strategies such as authorizing micro-housing units (300+ square feet), radically changing parking rules, and creating Complete Streets, which emphasize walking and biking. At the public hearing, CRDA praised the code as “prescient” and facilitating “long-term economic health and growth.”

Similarly, the CT Green Bank, a global trend-setter in renewable energy investment with $1 billion invested statewide, advised drafters on requirements (for example, electric vehicle charging stations in 35+ car lots), regulations (for example, allowing solar and wind energy everywhere), and incentives (for example, density bonuses for green roofs) that the Green Bank predicted will steer significant renewables-related investment to Hartford, which has some of the highest energy cost burdens in the state. The Green Bank testified that the code would “remove barriers to and encourage deployment of solar and other clean energy.”

4. Collaborate with Institutions of Higher Learning

Many cities and towns are near institutions of higher learning, ranging from technical schools to community colleges to universities. Hartford found that professors and students were more than willing to lend their expertise to the effort. Throughout the multi-year drafting process of the code, UConn Law School students researched countless legal issues, ranging from low-impact stormwater development to artificial turf impacts. In addition, Trinity College students photo-documented blighted and underused areas near new bus rapid transit stations, which helped identify transit-oriented development parcels for the updated zoning map. Collaborations with local educational institutions helped drafters push the envelope of zoning innovation and should certainly be replicated elsewhere.

For Hartford, this “lesson learned” continues to be useful to its planning efforts today. In one recent semester, the Climate Stewardship Council used interns from the University of Connecticut, Trinity, Eastern Connecticut State University, Central Connecticut State University, and UC-Berkeley, as well as a graduate student in the Environmental Defense Fund’s Climate Corps Fellow program. Each of these interns is contributing to the climate action planning process, which grew out of Hartford’s innovative zoning code.

New Life on Love Lane

Over the last few years, Community Solutions, a nonprofit organization that now owns the Swift Factory, has convened residents and community organizations in envisioning the site’s future. It has just obtained all planning and zoning permits and has sent its project out to bid. Uses will include a community kitchen, food business incubator, indoor aquaponic farm, health center, shared office, community space, sustainable site design, and bike parking, all of which are much-needed by the neighborhood, and most of which would have been impossible under the old zoning code. Its rebirth will help catalyze neighborhood progress, while addressing concerns of equity and environmental sustainability.

Perceptions of Hartford as a whole are changing, too. The code has received several awards: a statewide award for economic development from the Connecticut Economic Resource Center, a statewide award from the American Planning Association for “Transformative Zoning Code,” a six-state award from the New England Chapter of the Congress for New Urbanism for the form-based code, and sustainability awards from a regional council of governments, a statewide coalition of municipalities, and a local food policy advisory commission. It is hoped that these awards will encourage people to see Hartford as an attractive place to work, live, and invest. Although comprehensive zoning reform is by no means sufficient to revitalize a challenged city, it may well be necessary and can be powerful.