Among the tools that planners wield, none is more powerful or more commonly used than the ability to rezone land at the parcel, neighbourhood or city scale. Advocates of sustainable, healthy food systems typically focus on the intentional applications of zoning to improve neighbourhood food environments: allowing urban agriculture in residential and commercial areas; offering developers density bonuses to include supermarkets in their buildings; or restricting fast food establishments in neighbourhoods with high rates of obesity and diet-related diseases (Wooten et al. 2013; Sturm and Cohen 2009; Cohen 2014b, 57–85). However, these examples of intentional food zoning have produced mixed results. Although permitting farms and gardens in residential and commercial zones has enabled urban agriculture to flourish, developer incentives to include supermarkets in new buildings have led to only modest numbers of new stores. Attempts to limit access to unhealthy food through zoning restrictions on fast food restaurants have had insignificant effects on diets and population health (Sturm and Cohen 2009).

This chapter focuses on unintentional food zoning – zoning decisions aiming to create housing, redevelop contaminated industrial sites, improve the streetscape, or achieve other municipal goals that also have significant consequences for neighbourhood food environments. Planners and food system advocates often overlook the unintended effects of zoning on food, ignoring the substantial changes to the food system which they create. The chapter presents evidence from the New York City neighbourhood of East Harlem, a low-income community of colour which has been rezoned numerous times in the past two decades to stimulate economic development and is undergoing yet another rezoning to spur the
construction of affordable housing. The case illustrates how rezoning has led to numerous changes to the neighbourhood’s food retail sector, with significant consequences, positive and negative, for current and future residents. It argues that planners, policy-makers and community residents who care about access to healthy, affordable food need to pay attention to, analyse and address the effects of zoning changes that may appear at first glance to be unrelated to the food environment.

16.1. Food planning in New York City

Throughout the twentieth century, urban planners largely ignored the food system, treating food production as an exclusively rural activity and relegating responsibility for distribution and marketing to the private sector (Pothukuchi and Kaufman 2000). In the US, this perspective began to change in the 2000s as rising rates of obesity and diet-related chronic diseases made healthy food access a politically salient issue at the same time as growing demand for locally produced food put the vulnerabilities of regional food systems on the radar screen of activists, entrepreneurs and local political leaders. More recently, climate-change-induced extreme weather has heightened attention to precarious food system infrastructure. In response, planning and public health organisations, along with advocacy groups, have supported urban food planning initiatives that have led to new policies, programmes, advisory councils and spatial plans designed to improve nutrition and health, eliminate disparities in access to healthy food and increase the resilience of the urban food system (Pothukuchi 2009; Morgan 2013).

As in many US cities, New York’s food system has reinforced underlying economic and social disparities, contributing to a wide range of health problems, particularly among low-income people of colour. Out of a population of approximately 8.5 million, approximately 1.36 million New Yorkers are food insecure and 1.8 million depend on federal Supplemental Nutrition Assistance Program (SNAP) benefits to buy food (City of New York Department of Health and Mental Hygiene 2015). Racial and ethnic disparities in access to healthy food, levels of obesity, and prevalence of diet-related illnesses are significant. More than half of adult New Yorkers are overweight or obese, and 20 per cent of kindergarten students are obese, with rates significantly higher among African Americans and Latinos than Whites (Freudenberg et al. 2018).

Early efforts at food planning in New York City focused on reducing diet-related diseases. Mayor Bloomberg created an Office of Food Policy
in 2007 to improve the nutritional standards of the approximately 250 million meals and snacks served by city agencies each year; increase enrolment in federal food subsidy programmes like SNAP; and promote access to healthy food in neighbourhoods with an inadequate number of supermarkets (Wurwarg 2014). The mayoral-controlled Board of Health also adopted regulations to reduce chronic diseases by prohibiting restaurants from using trans fats, requiring calorie labelling on the menus of chain restaurants and attempting, albeit unsuccessfully, to limit serving sizes for sugar-sweetened beverages (Freudenberg and Atkinson 2015). Other city policies to improve nutrition included support for farmers’ markets; financial incentives (called ‘health bucks’) for SNAP recipients to shop at farmers’ markets; programmes to help convenience stores stock healthier food; and permits for fruit and vegetable pushcarts in neighbourhoods with inadequate fresh food retailers (City of New York Department of Health and Mental Hygiene 2015).

Two elected officials, the Borough President of Manhattan and the Speaker of the City Council, expanded the scope of food policy beyond health by releasing food strategies in 2010 addressing issues like regional agriculture, food distribution, food business development and food waste, as well as nutrition. Though not formally adopted as city plans, the documents were crafted with stakeholder input, thus garnering the support of diverse food advocates who saw the issues they cared about (e.g. hunger, food-related economic development, environmental impacts of food) reflected in the documents. Moreover, the City Council’s strategy, FoodWorks, legitimised local policy intervention in the food system and committed the City Council to food-related legislation and oversight. The Borough President’s document, Food in the City, illustrated that food is an issue appropriately addressed by elected officials primarily responsible for land use, budgeting and service delivery at the borough and neighbourhood scales. Both strategies prompted Mayor Bloomberg to add food system goals to a 2011 update of his citywide sustainability platform, PlaNYC, which had previously been silent about food. Food continues to be incorporated into the city’s current sustainability plan, One New York: The Plan for a Strong and Just City.

In addition to these food strategies and food-infused sustainability plans, New York City has used spatial planning to integrate the city’s approximately 900 food-producing gardens and farms, ranging from rooftop hydroponic greenhouses to small school gardens, into the cityscape (Altman et al. 2014). The city’s zoning text allows agriculture as of right in all parts of the city, so, unlike many other US cities, New York has not had to legalise the practice. However, many urban gardens and farms
operate on public land, and conflicts over their tenure and competing uses, like affordable housing, have persisted for decades (Reynolds and Cohen 2016; Cohen 2016). Planning at the project scale has enabled city agencies like the Department of Housing Preservation and Development (HPD) and the New York City Housing Authority (NYCHA) to integrate farms atop and adjacent to new and existing residential projects (Cohen 2014a, 138–45). At the citywide scale, a programmatic green infrastructure plan to increase permeable surfaces to absorb stormwater that would otherwise inundate the sewer system has invested nearly US$600 000 in a 0.4-hectare rooftop farm and another US$770 000 in several smaller farms and gardens (Cohen and Wijsman 2014). The Department of City Planning has also supported rooftop agriculture through a zoning text amendment to exempt rooftop greenhouses on commercial buildings from bulk and height limits, increasing the number of buildings that can accommodate rooftop food production (Cohen et al. 2012).

Spatial planning has also been used to provide incentives for grocers to locate in neighbourhoods lacking access to fruits and vegetables and other healthy food. In 2009, the New York City Department of City Planning (DCP) created a programme called Food Retail Expansion to Support Health (FRESH), which combined financial and zoning incentives for supermarkets in such neighbourhoods, which are mapped in Figure 16.1 (New York City Economic Development Corporation [NYC EDC] 2015). The financial incentives include tax abatements and exemptions, while the zoning incentives allow property developers to build larger buildings than otherwise permitted under the existing zoning (one additional square metre of residential floor area for each square metre of grocery store space, up to 1858 more square metres) by including a neighbourhood grocer on the ground floor. To qualify for this bonus, the grocer must have at least 557 m$^2$ for general groceries, half for food intended for home preparation and consumption and 30 per cent for perishable food, with a minimum of 46 m$^2$ for fresh produce. FRESH zoning also reduces parking requirements and allows food stores on land zoned for light manufacturing as well as commercial use (Cohen et al. 2012). The results of the FRESH programme have been modest: since 2009, 27 FRESH supermarkets have been approved for financial and/or zoning incentives, and 14 of these have been built (City of New York Office of the Director of Food Policy 2017). Barriers to the programme include the reluctance of developers and grocery operators to participate in a city incentive programme and the dearth of vacant spaces of 557 m$^2$ or more (NYC EDC 2015). Moreover, the density bonus incentive may not be sufficient in neighbourhoods with very low housing prices.
Although policy and spatial planning has led to numerous interventions in New York City’s food system, zoning changes that are ostensibly not about food have in fact resulted in some of the most significant food impacts. This is partly a legacy of New York City’s lack of a comprehensive plan, which has led the city to rely heavily on zoning to direct its

Figure 16.1 FRESH programme eligibility areas. (Source: Used with permission of the New York City Planning Commission. All rights reserved)
growth and achieve broad municipal goals (Angotti 2009). From 2002 to 2013, for example, the administration of Mayor Bloomberg completed 120 separate rezonings that affected nearly a fifth of the city’s land (McDonnell et al. 2010) (see Figure 16.2). The process has continued under the current mayoral administration of Bill de Blasio, which is rezoning low-income neighbourhoods throughout the city to increase the allowable residential density to spur housing construction that will be required to include affordable dwelling units. Six neighbourhoods, including East Harlem, are in the midst of community-wide planning and rezoning, with nine more to follow (City of New York Office of the Mayor 2014, 7; Navarro 2015).

Figure 16.2  Zoning map amendments adopted since 2002. (Source: Used with permission of the New York City Planning Commission. All rights reserved)
Rezoning has two main effects on neighbourhood food environments. The direct consequences include changes to the allowable uses, size, density or configuration of buildings which determine whether and where food retailers, restaurants, farms, farmers’ markets and food processing and distribution facilities can locate. Rezoning can increase opportunities for new food retail by, for example, changing a site’s zoning from manufacturing to commercial use. Rezoning can also displace existing food businesses by making other, more profitable development possible, for example by allowing high-rise residential and commercial uses on a property previously zoned only for low-density commercial use. Rezoning also can have significant indirect effects on food environments by stimulating real estate development in a neighbourhood, increasing population density and reducing the ratio of food retail space to the number of residents, potentially exacerbating gaps in food access unless there is a corresponding growth in food retailers. Induced development can also change a neighbourhood’s socioeconomic composition, thus influencing shopping and spending patterns that determine the types of businesses a neighbourhood can support, and therefore the quality, provenance and prices of food offered for sale. New development may drive up commercial rents, pricing grocers out of business; and new higher-income residents may shift the retail market to more expensive food.

Despite these direct and indirect effects, planners rarely analyse the consequences of rezoning on neighbourhood food environments when they design, propose and shepherd zoning proposals through public review and approval processes. Three factors account for this inattention. First, despite increasing interest in food systems over the past two decades, food remains a ‘stranger to the planning field’, off the radar screen of most planning departments which focus on more conventional planning domains like transportation and housing (Pothukuchi and Kaufman 2000). Second, although state and local environmental review laws often require analysis of the effects of zoning changes on the neighbourhood economy, they typically do not require explicit attention to the effects on food retail. Instead, planners typically treat commercial food establishments like other types of businesses, such as banks or pharmacies, which move in and out of neighbourhoods as communities evolve and consumer demand changes. Hence, food system impacts are often considered to be insufficiently significant to warrant more detailed review. The lack of a food analysis in the zoning process is all the more glaring when contrasted with the many other effects that get scrutinised.
in great detail: population density, vehicular traffic, housing prices, shadows, water and sewer capacity and other issues of concern to residents. Third, zoning remains arcane to non-planners, inhibiting active political involvement in the zoning process by food system advocates.

16.3. The case of East Harlem

East Harlem, a low-income community in northern Manhattan, has undergone numerous zoning changes since the late 1990s, some area-wide and others limited to specific development sites. These rezonings have had three principal effects on East Harlem’s food environment: supermarket displacement; the creation of new sites for specific types of food retailers; and the expansion of food retail as zoning has changed the neighbourhood’s characteristics. Yet these effects were never explicitly considered when zoning proposals were introduced, debated and adopted.

16.3.1. Background on East Harlem

East Harlem has been a working-class, immigrant community for many generations (see Figure 16.3) and it remains a low-income community of colour. Its population is 50 per cent Hispanic and 31 per cent Black, with growing numbers of Mexican and Asian immigrants (King et al. 2015). East Harlem’s median household income is US$30 335 per year compared with US$51 526 for New York City as a whole, with an unemployment rate of 11.5 per cent compared with 6.7 per cent for New York City (Community Board 11, 2015). Nearly a third (31 per cent) of its residents live below the poverty line, compared with 21 per cent of residents in New York City (King et al. 2015). Two-thirds of the neighbourhood’s dwelling units are either in government-assisted housing programmes (39 per cent) or in public housing developments operated by NYCHA (28 per cent). The persistence of government housing makes it likely that the neighbourhood will continue to be home to large numbers of low-income residents for the foreseeable future (Furman Center 2014). Approximately 39 per cent of East Harlem residents receive SNAP benefits, and nearly a quarter of the population has reported being food insecure (Freudenberg et al. 2016).

East Harlem has also experienced significant new public and private investment since the mid-1990s. The neighbourhood’s location in Manhattan, just north of the high-income Upper East Side and easily accessible to Midtown and Lower Manhattan business districts, has made
Figure 16.3  City map of Manhattan, New York with boundaries of Community District 11. (Source: Used with permission of the New York City Planning Commission. All rights reserved)
it desirable for those priced out of other Manhattan neighbourhoods, and thus has been prone to gentrification and displacement. Demand for housing in East Harlem has resulted in increased rents for new residential leases: between the periods 2005–7 and 2011–13, the median rent in East Harlem for recent movers increased by 35.7 per cent, compared with 9.3 per cent for the city as a whole, spurring the construction of new rental and condominium projects (Furman Center 2014). An influx of higher-income residents has also increased economic disparities in the neighbourhood. Between 2005 and 2013, East Harlem’s income diversity, the gap between highest and lowest income (measured by dividing the income of households in the 80th percentile by the income of households in the 20th percentile) widened from 6.2 to 8 (Furman Center 2014).

Development pressures in East Harlem have resulted from public policies and financing aiming to encourage real estate development throughout northern Manhattan, which includes the neighbourhoods of West, Central and East Harlem. For example, the Upper Manhattan Empowerment Zone Development Corporation (UMEZ), a not-for-profit corporation established in 1994, has provided US$73 million in loans to mixed-use real estate development projects, commercial businesses and small business enterprises throughout northern Manhattan, as well as tax-exempt bonds for real estate development projects (UMEZ 2015). City agencies like the DCP, HPD and EDC have also disposed of city-owned property, offered tax subsidies and increased the allowable floor area ratio (FAR) on parcels throughout northern Manhattan to encourage new development.

16.3.2. Rezoning and supermarket displacement

Rezoning to stimulate new development along Harlem’s historic 125th Street, a prominent east–west commercial corridor, contributed to the displacement of a large supermarket that was an important source of healthy food for East Harlem. In 2003, the DCP and other city agencies conducted a study and strategic planning process for the corridor which led to a rezoning proposal to make 125th Street a retail and entertainment destination by encouraging new mixed-use development, arts institutions and retail activities on this street (see Figure 16.4). The new zoning designation allows denser and taller buildings in the area and introduces mixed-use developments on lots that were once zoned only for commercial activity. The 125th Street rezoning aimed to encourage new development; impose urban design controls to ensure that development was in context with the neighbourhood’s scale and character; expand the
Figure 16.4 Special 125th Street district zoning map. (Source: Used with permission of the New York City Planning Commission. All rights reserved)
uses permitted along the street; and provide for housing construction by offering density bonuses for housing that included affordable units. The increase in development resulting from the rezoning was projected to include 2328 new residential units, 19 378 additional square metres of retail commercial space, 40 507 additional square metres of office commercial space and 1084 m$^2$ of new hotel space, along with reductions in community facilities, storage and manufacturing, and parking or auto repair uses (UMEZ 2014).

The rezoning contributed to the displacement of a large one-storey Pathmark supermarket located on 125th Street in East Harlem by increasing the development potential of the Pathmark site as well as nearby parcels in the rezoned area. Although the loss of one food retailer to development may not seem significant, this particular retailer’s presence in East Harlem was the product of a long struggle in the community for access to a full-service supermarket. The East Harlem Pathmark opened in 1997 after a decades-long activist campaign to bring a supermarket to the neighbourhood, which only had smaller grocers and convenience stores (‘bodegas’). Getting Pathmark to East Harlem involved multiple attempts by the city’s EDC to attract a supermarket operator to a publicly owned parcel the size of a full city block on East 125th Street between Lexington Avenue and Third Avenue. At the time, retailers viewed the location as high risk, serving primarily low-income people of colour on a street perceived as dangerous (Eisenhauer 2001). Bottom-up pressure from activists combined with interest by UMEZ in a retailer that would draw shoppers to nearby UMEZ-financed commercial properties prevailed, despite objections from the owners and operators of the existing independent grocers and bodegas that public subsidisation of a supermarket would unfairly disadvantage their businesses. The EDC eventually sold the land at a below-market price of US$1.5 million to a local non-profit corporation, the Abyssinian Development Corporation (ADC), which developed the site and attracted Pathmark, a subsidiary of the Great Atlantic & Pacific Tea Company (A&P) to operate a 4920 m$^2$ supermarket.

By rezoning 125th Street, the city made higher-density residential, commercial and office development feasible along the entire east–west corridor in Harlem, increasing the value of parcels on 125th Street like the Pathmark site which were built to significantly smaller scale than allowed under the new zoning. The Pathmark site could accommodate 41 800 m$^2$ of buildable space, 27 900 m$^2$ of air rights for residential development, and additional development bonuses for affordable housing, making the one-storey supermarket an uneconomic anachronism. In
2013, a developer purchased a parcel just one block west of Pathmark for US$66 million to build two 32-storey residential towers totalling more than 55 700 m$^2$, 650 residential units (approximately 70 at affordable rents) and 6500 m$^2$ of retail space. In 2014, the real estate development company Extell bought the Pathmark parcel from ADC for US$39 million and announced plans to replace the one-storey supermarket with a much larger mixed-use project. Coincidentally, Pathmark’s parent company, the Great Atlantic & Pacific Tea Company, filed for bankruptcy on 20 July 2015 (Great Atlantic & Pacific Tea Company 2015), and by December 2015 the Pathmark supermarket that the community had fought so hard to bring to East Harlem shuttered its doors, meaning the loss of a major food retailer and some 200 unionised jobs. Extell has not announced whether its new building will include food retail.

16.3.3. Rezoning for big box food retailers

Rezoning to redevelop a derelict industrial site (‘brownfield’) in East Harlem was designed specifically for a big box food retail format. On 7 September 1999, the City Planning Commission rezoned land in East Harlem (between 116th and 119th Streets near the East River) which had been occupied by a defunct manufacturing facility, the Washburn Wire Factory, so that it could be redeveloped into East River Plaza, a 44 000 m$^2$

Figure 16.5  East River Plaza. (Source: Wikipedia media open source)
shopping centre. The primary planning goal was to turn the site into a commercial facility that would generate tax revenue, create jobs and capture sales revenue that would otherwise be lost to nearby suburban shopping centres. Its effect on food retail was to create commercial space to accommodate food retailers Costco and Target and eventually an Aldi supermarket (see Figure 16.5).

The process involved several interconnected zoning decisions: changing allowable uses on the site from manufacturing and residential to a range of commercial uses; issuing a special permit for a large parking garage accommodating 1250 vehicles; changing the street configuration; issuing a special permit to change height and setback requirements to facilitate big box commercial space; and transferring the land from the city to a developer. The special permits issued for the project defined the permitted form, size and uses in a way that fitted the footprint of big box retailers, a deliberate policy decision to accommodate the developer’s aim to lease the space to the food retailer Costco (along with the home improvement big box retailer Home Depot). UMEZ also provided a US$15 million loan and US$40 million in tax-exempt bonds (UMEZ 2014).

The City Planning Commission and City Council approved the rezoning, yet, despite the significant effect of a new Costco and Target (and later Aldi) on food access in East Harlem, the consequences for food availability and impacts on other food retailers in the community were not intended by the rezoning, nor were the consequences for competing food businesses or the health of the neighbourhood residents analysed in the project’s environmental impact assessment. During the project’s environmental review, which required agencies to assess alternatives to proposed action, the Department of City Planning considered, but dismissed as less feasible, a ‘local retail mix’ alternative in which the site would be zoned for a mixture of six 930 m² local retail stores and a 5600 m² supermarket.

16.3.4. Upzoning and food gentrification

Upzoning is the process by which a city increases the allowable FAR or scale of development, thus increasing land value and development potential. Urban planners choose to upzone communities for different reasons: to convert a low-rise manufacturing area into a residential neighbourhood; to increase density around transit nodes to encourage the use of mass transit; to maximise the efficiency of other municipal infrastructure such as water and sewer systems or schools and public safety facilities; or
to meet the housing needs of a growing population. Upzoning has also been used as a way to offer residential developers additional density in exchange for creating below-market units that can be afforded by lower-income residents.

During the Bloomberg administration, East Harlem was upzoned numerous times to encourage the construction of new residential and commercial buildings. The goal was to stimulate economic development in northern Manhattan while also creating new affordable housing units. A sample of the outcomes of these zoning changes in East Harlem include:

- the development of more than a dozen new 8–12-storey mixed-use residential and commercial buildings;
- the creation of the East Harlem Media, Entertainment and Cultural Center, a 158,000 m$^2$ housing, retail and cultural project;
- the development of Harlem Park, a 46,500 m$^2$ mixed-use project with a hotel, 100 residential units, offices, retail space and a parking garage (City Planning Commission 2004);
- a new 110-unit rental building with 500 m$^2$ of ground floor commercial/retail space and 42 m$^2$ of community space (City Planning Commission 2005);
- the conversion of a vacant city lot into a 314-unit, 27,500 m$^2$ residential building with 217 m$^2$ of commercial space (City Planning Commission 2011);
- a new 12-storey building with 179 units of affordable housing, 506 m$^2$ of retail, 364 m$^2$ of community facility space, 27 parking spaces and 874 m$^2$ of recreational open space (City Planning Commission 2015).

One consequence of these and other projects has been the attraction of higher-income residents to East Harlem, as reflected in rapidly growing residential real estate prices. Between 2011 and 2014, the average price per square metre for multifamily rental buildings in East Harlem rose 104 per cent to US$4121, while the price per unit for multifamily rental buildings rose 182 per cent to US$414,565. The influx of higher-income people and escalating housing prices have raised concerns about residential displacement as landlords of existing properties have tried to take advantage of the changing real estate market by attempting to evict existing tenants and raise rents (Mark-Viverito and Brewer 2016; Busà 2014).

Commercial displacement has also become a concern because owners of commercial spaces, which are not subject to government rent controls, have sought, as leases expire, to rent to businesses that can afford higher rents (Busà 2014). Since 2000, retail rents in Upper Manhattan
have risen 41 per cent (Real Estate Board of New York 2015). Increasing real estate value also puts pressure on the owners of so-called ‘soft sites’, parcels that have buildings substantially smaller than the maximum allowable FAR under existing zoning, to sell their properties or develop them with structures that maximise development potential. In East Harlem, four of the community’s 18 supermarkets are located on soft sites that could accommodate higher-density residential and/or commercial uses (see Table 16.1).

The influx of higher-income residents and cultural and commercial uses that attract higher-income visitors may also lead to ‘food gentrification’. Analogous to residential gentrification, food gentrification is the process by which higher-income residents contribute to the displacement of existing affordable food establishments by virtue of their higher levels of disposable income and more expensive tastes in food. This leads to decisions by higher-end grocers and restaurants to locate in a gentrifying neighbourhood, or prompts existing food retailers to upgrade their stores, change their product selections and raise prices, making these establishments financially off-limits to existing residents (Anguelovski 2016). Symbolic barriers like different types of food combined with higher prices can prevent existing low-income residents from taking advantage of new food retailers and restaurants in gentrifying neighbourhoods (Sullivan 2014). Even without physical displacement, residents remaining in East Harlem can experience the loss of a sense of

<table>
<thead>
<tr>
<th>Supermarket</th>
<th>Zoning</th>
<th>Commercial overlay</th>
<th># floors</th>
<th>Current FAR</th>
<th>Allowable Commercial FAR</th>
<th>Allowable Residential FAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associated Supermarket</td>
<td>R7-2</td>
<td>C1-4</td>
<td>1</td>
<td>0.99</td>
<td>2</td>
<td>.87–3.44</td>
</tr>
<tr>
<td>Fine Fare Supermarket</td>
<td>R7X</td>
<td>C2-5</td>
<td>2</td>
<td>1.95</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Met Supermarket</td>
<td>R7A</td>
<td>C2-5</td>
<td>1</td>
<td>0.93</td>
<td>2</td>
<td>4.0/</td>
</tr>
<tr>
<td>Fine Fare Supermarket</td>
<td>R7A</td>
<td>C1-5</td>
<td>1</td>
<td>1.05</td>
<td>2</td>
<td>6.02/4.0</td>
</tr>
<tr>
<td>Cherry Valley Marketplace</td>
<td>R8A</td>
<td>C1-5</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4.0/6.02</td>
</tr>
</tbody>
</table>

Source: oasisnyc.net
place as the food establishments they are used to frequenting change or close owing to the neighbourhood’s changing socioeconomics (Shaw and Hagemans 2015).

16.3.5. Rezoning and the displacement of food production

Food retail is not the only segment of the food system affected by rezoning. As a neighbourhood loses vacant lots and small manufacturing buildings to mixed-use buildings with new apartments and shops, spaces for activities like urban agriculture, small-scale food processing, and opportunities for local food distribution hubs – components of a diverse food system that contribute to resilience – may disappear. In New York City, the tradeoff between urban agriculture and housing has been the most controversial. In 1998, for example, Mayor Rudolph Giuliani attempted to sell 114 community garden sites to housing developers, framing the proposal in terms of the need to build new housing. Urban agriculture advocates and their allies thwarted Giuliani’s plan, allowing the preservation of most of the sites, but threats to urban agriculture continue. For example, in 2015, the de Blasio administration’s HPD proposed selling to housing developers 50 city-owned parcels that were being cultivated for food. Following a year of protests and negotiations, the Mayor announced on 30 December 2015 that 34 of these gardens would be spared development, and the city would attempt to relocate the others (Cohen 2016).

This decision was significant for East Harlem because a cluster of six gardens had been in operation on a large city-owned site slated for an affordable housing project. The developer of the new residential project will be required to fit the most active four of the six gardens into the site plan. Although the conflict between agriculture and housing is not a zoning issue per se, it illustrates that the effects of development on urban agriculture and local food production are not typically considered before the planning of city development projects made feasible through neighbourhood rezoning.

16.3.6. Changes in East Harlem food retail

As noted above, some zoning decisions have directly affected food retail in East Harlem, increasing property values and making one-storey supermarkets economically unfeasible or carving out spaces for particular types of food retailers such as Costco, the world’s second-largest retailer (Deloitte 2015) and America’s largest organic food seller (Foodbusinessnews.net 2015). Other zoning changes have indirectly affected food
retail by stimulating higher-priced development, resulting in increased property values and real estate development activity that continues to put pressure on existing food retailers (Satow 2014). Zoning over the past two decades has resulted in the following significant changes to East Harlem’s food environment:

- the number of food retailers has grown by more than 40 per cent, increasing the availability of healthy and unhealthy food throughout East Harlem;
- the number of supermarkets has increased from 10 in 2000 to 17, though Costco, Target and Aldi are clustered on the periphery;
- new types of food retailers, including fruit and vegetable pushcarts, farmers’ markets and chain pharmacies that sell groceries, have emerged;
- some smaller supermarkets have upgraded their spaces and changed their branding to remain competitive, and at least one is reported to have lost its lease because the property owner built a larger structure with ground-floor retail space leased to a pharmacy at a higher rent;
- the number of restaurants has grown more than 80 per cent, reflecting an increase in the frequency with which people eat out or buy food ready for consumption;
- the number of franchise or fast-food restaurants in East Harlem has more than quadrupled from 11 in 2000 to 47 in 2015, reflecting growth in the fast food sector (Freudenberg et al. 2016).

Conclusions: strategies for healthy food zoning

The unintended effects of rezoning on food in East Harlem illustrate the need for city planners to be more attentive to whether and to what extent prospective rezoning affects a community’s food system, for better and for worse. Consideration of the effects of rezoning on food needs to happen as the planning process begins and before ideas for rezoning are proposed—and certainly before the zoning code is changed. Moreover, changes to community food environments should be tracked following major rezoning projects to ensure that access to healthy, affordable food does not decrease over time, and to provide empirical evidence of how zoning affects food.

There are several steps that planners can take to ensure that all the effects of zoning on food are made with intention and public deliberation.
One is for a city to adopt a ‘no net loss’ policy for food retail. This means that if rezoning a community increases the number of residential units there should be an equivalent increase in commercial space suitable for supermarkets, grocers and other food retailers to ensure no net loss of fresh food retail per capita. Putting this into practice requires analysing food retail capacity, a process that is routinely carried out to assess other infrastructure capacity, but that is rarely done for food retail. Adding food to the list of municipal systems (e.g. transportation, water, schools) currently evaluated in environmental assessment processes would ensure that planners considered food as they developed proposed zoning changes, and would provide data on potential impacts to enable residents to more effectively participate in public reviews of proposed zoning changes.

Another step is to proactively use the rezoning process to carve out spaces for a variety of food activities that make a municipal food system resilient beyond supermarkets. These activities include manufacturing spaces for food incubators and new food businesses; open space for urban agriculture; and spaces to facilitate alternative forms of food retail, such as community supported agriculture (CSA) drop-off sites, food buying clubs and farmers’ markets, which may require different types of interior and exterior space from conventional supermarkets, but may also have different needs for delivery and truck parking, and access to electricity and water, and may be able to fit into multiple-use spaces of different sizes and spatial configurations. In a similar vein, planners can propose zoning incentives to encourage developers to integrate food infrastructure into different types of buildings and spaces. Zoning texts could offer additional developable space for gardens and farms, commercial kitchens, food distribution infrastructure, and composting facilities built into new development projects. Cities could prioritise the reuse of industrial sites for food distribution infrastructure, particularly those obsolete manufacturing facilities considered too small for continued manufacturing use or too close to housing to be safe as a reused manufacturing facility. These sites are often rezoned for commercial or residential uses, but instead could serve as food hubs supporting a distributed and diverse food infrastructure that could reduce reliance on centralised and thus vulnerable terminal food markets.

Finally, zoning decisions that are expected to change the demographic composition of a community, particularly those leading to gentrification, require extra effort to ensure food availability and affordability for those remaining as the neighbourhood experiences an influx of higher-income residents. Zoning experts in planning departments can work
with economic development, human resources, education and other professionals to find ways to improve access to federal food benefits, school food and emergency feeding programmes as part of the rezoning process. This may involve offering zoning bonuses for facilities – from SNAP application centres to food pantries – that are built into new mixed-use projects.

In conclusion, by measuring and disclosing the effects of unintentional food zoning on neighbourhood food systems, and by taking steps to intentionally design zoning changes to enhance food access, planners and food advocates can improve neighbourhood food environments as they achieve other goals of the zoning process.

Notes

2. New York City consists of five boroughs, each with an elected president who has land use, budget and service delivery responsibilities for the borough.

References


