New York City Rules! Regulatory Models for Environmental and Public Health

Jason J. Czarnezki
Articles

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Regulatory Models for Environmental and Public Health

JASON J. CZARNEZKI*

Scholars have become increasingly interested in facilitating improvement in environmental and public health at the local level. Over the last few years, former New York City Mayor Michael Bloomberg and the New York City Council have proposed and adopted numerous environmental and public health initiatives, providing a useful case study for analyzing the development and success (or failure) of various regulatory tools, and offering larger lessons about regulation that can be extrapolated to other substantive areas. This Article, first, seeks to categorize and evaluate these “New York Rules,” creating a new taxonomy to understand different types of regulation. These “New York Rules” include bans, informational regulation, education, infrastructure, mandates, standard-setting, and economic (dis)incentives. In particular, this Article focuses on urban transportation and food systems, including the failed market-based congestion pricing plan for Lower Manhattan; the Citi Bike infrastructure; the proposed “Sugary Drink” ban; informational calorie labeling on food menus; and the emerging compost pollution prevention plan. This Article provides insight into the challenge of matching the proper regulatory tool with any environmental and public health problem, suggesting that certain approaches are more appropriate than others. In general, society requires more forceful nudges than seen to date and, where this kind of push is not possible, policymakers should proceed to lay the groundwork with norm-shifting regulation. Infrastructure shifts are also a successful type of intervention when more intrusive regulation fails. In summary, law proves to be a workable tool to change individual behavior, and major government action can influence social norms and create improved infrastructure.

* Jason J. Czarnezki, A.B., J.D., University of Chicago; Gilbert and Sarah Kerlin Distinguished Professor of Environmental Law and Executive Director of Environmental Law Programs, Pace Law School. I wish to thank Sharon Jacobs for her outstanding commentary and suggested revisions on an earlier draft of this Article, and Steven E. Gavin (J.D. Candidate, Pace Law School, 2014) for his valuable research assistance, as well as attendees of the Kerlin Lecture at Pace Law School in September 2013, participants in the 2013 Colloquium on Environmental Scholarship at Vermont Law School, and Katrina Kuh and participants in the Maurice A. Deane School of Law at Hofstra University Faculty Workshop.

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Introduction

Scholars and policymakers alike have become increasingly interested in uniting environmental and public health policy at both the global and local level. Given the lack of environmental legislation passed at the national level in the United States since the 1970s, this should come as no surprise. Instead, examples of environmental progress can be found in harnessing local action, especially in urban metropolises around the globe, to remedy global environmental concerns.

Environmental law must now contend with the globalization of environmental harm. The democratization of pollution sources, and “environmental legal norms have become increasingly internationalized.” However, the globalization of environmental law and policy is not without irony. Pollution sources and public health concerns remain domestic and increasingly localized despite international impacts. In light of global environmental problems, lacks of forthcoming international or national solutions, and increased focus on local actions, it makes sense to spend some time thinking about approaches to regulation at the local level. “Local environmental law” has proliferated in an attempt to improve quality of life for individuals and their communities while simultaneously seeking to improve global environmental concerns. Such “local

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environmental law” often pursues such change through the regulation of individual behavior and activities associated with the living of our daily lives.

“[P]erhaps the greatest challenge in changing individual behavior is recognizing that the proper law, regulatory tool, or public policy initiative must be matched to the appropriate behavior to effectively facilitate change.” The challenges facing local environmental regulation are, in many cases, the same as those affecting regulatory systems of all sizes. A more challenging query is whether there is anything that distinguishes the matching problem at the local level from matching at other levels, such as civic engagement, and does this difference impact regulatory success? That is, whether with more citizen involvement cognitive biases have freer rein. This Article provides insight into this challenge of matching the proper regulatory tool to solve environmental and public health problems.

The key challenge is matching the proper tools to the behavior or norm that requires modification. Tools include informational disclosures (like eco-labels and informational schedules), economic and market-based incentives (such as subsidies and taxes), traditional regulatory measures that permit or ban behavior, and standards for pollution, energy efficiency and product performance. The advantage of non-enforcement approaches, however, like information, public education, and market-based incentives, is that they offer ‘ex ante approaches that seek to prevent noncompliance from occurring in the first place. Regulatory methods designed to influence individual behavior, recognizing their advantages and disadvantages, combined with public education may be sufficient to achieve norm and behavioral change, when tailored to meet the particular harm and audience.  

Over the last few years, former New York City Mayor Michael Bloomberg and the New York City Council proposed and adopted numerous environmental and public health initiatives, providing an amazing case study for analyzing the development and success (or failure) of various regulatory tools. This Article seeks to categorize and evaluate a subset of these “New York Rules” which include:

- Bans: foam containers, sugary drinks, smoking in public spaces, trans fat, displaying tobacco products;
- Informational regulation: displaying food calorie information;
- Education: marketing campaign about the dangers of excess drinking;
- Infrastructure: salad bars in schools, public space recycling, bike lanes, tree planting;
- Mandates: e-waste recycling;

5. Id. at 148–49 (citing Hope M. Babcock, Assuming Personal Responsibility for Improving the Environment: Moving Toward a New Environmental Norm, 33 Harv. Envtl. L. Rev. 117, 165 (2009)).
• Standard-setting: energy efficient building standards; and
• Economic (dis)incentives: congestion pricing.

This Article hopes to instruct on the effectiveness of such regulatory tools in terms of their acceptance by the public, passage by the legislature, implementation and enforcement by the executive, environmental and public health outcomes. It also will evaluate how New York City successfully addressed “environmentally significant individual behaviors” in the specific sectors of urban transportation and food systems.

In particular, this Article broadens the conception of environmental law beyond the federal statutes passed in the 1970s and offers insight into the modern role of the State in promoting environmental and public health. In discussing old and new approaches to regulation, Professor Lawrence Lessig writes:

Both the old school and new share an approach to regulation that focuses on regulators other than the law. Both, that is, aim to understand structures of regulation outside law’s direct effect. Where they differ is in the lessons that they draw from such alternative structures. From the fact that forces outside law regulate, and regulate better than law, the old school concludes that law should step aside. This is not the conclusion of the new school. The old school identifies alternative regulators as reasons for less activism. The new school identifies alternatives as additional tools for a more effective activism. The moral of the old school is that the state should do less. The hope of the new is that the state can do more.

This Article can be seen as part of a regulatory approach that, unlike the old school, does not see alternative approaches (such as, individual behavior or social norms) as displacing law; “[r]ather, the new school views them as each subject to law.”

This Article provides an initial framework for determining how regulation can be more effective in shifting individual behavior and social norms. It focuses on the challenge of matching the proper regulatory tool to solve any environmental and public health problem, suggesting that certain approaches are more appropriate than others. Part I of this Article outlines the regulatory methods available for addressing environmental and public health harms. Part II describes the various environmental and public health initiatives recently proposed and implemented in New York City, providing a new taxonomy to understand

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8. Lessig, supra note 7, at 661.
9. Id. at 666; see also LAWRENCE LESSIG, CODE VERSION 2.0 123 (2006) (noting regulatory constraints of the law, social norms, the market, and architecture).
different types of regulation. Part III evaluates more theoretical notions of regulation, such as nudges and social norms, and how they might inform us as to the proper strategy for effectively passing and implementing effective regulatory approaches in our local environments. The Article concludes that law is a workable tool to change individual behavior, and major government action can influence social norms and create improved infrastructure. Policymakers should use a combination of strategies to facilitate effective change; for example, they should rehabilitate traditional regulatory tools through initial nudging to allow for stronger political outcomes. Local government should not fear reliance on strong traditional regulation, or “pushes,” to get at individual actions, despite the political challenges (such as, congestion pricing). In general, society requires more forceful nudges than we have seen to date in some areas, and, where this kind of push is not possible yet, we need to lay the groundwork with some norm-shifting regulation that might be more palatable politically or to the public. Infrastructure shifts can also be a more successful type of intervention where more intrusive regulation fails.

I. Regulatory Methods for Addressing Environmental and Public Health Harms

There are multiple regulatory tools available for addressing environmental and public health harms, or, for that matter, any resource or commodity. As seen in Table 1 below, these regulatory methods generally fall into six categories, providing a useful taxonomy as policymakers assess the regulatory options available to them for abating various environmental harms.\textsuperscript{10} The purpose in accounting for different regulatory options is that “[l]aw can select among these various techniques in selecting the end it wants to achieve. Which it selects depends on the return from each.”\textsuperscript{11} It is important “to speak comprehensively about these tools—about how they function together, about how they interact, and about how law might affect their influence.”\textsuperscript{12}


\textsuperscript{11} Lessig, supra note 7, at 672.

\textsuperscript{12} Id.
TABLE 1: REGULATORY METHODS FOR REDUCING ENVIRONMENTAL AND PUBLIC HEALTH HARMs

<table>
<thead>
<tr>
<th>Type</th>
<th>Also Known As</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard-setting</td>
<td>Technology-based standards; health-effects standards</td>
<td>National Ambient Air Quality Standards</td>
</tr>
<tr>
<td>Information</td>
<td>Labeling; inventories</td>
<td>Toxic Release Inventory</td>
</tr>
<tr>
<td>Bans</td>
<td>Prohibitions</td>
<td>Plastic bag bans</td>
</tr>
<tr>
<td>Market-based</td>
<td>Cost-benefit analysis, economic incentives; subsidies; taxes; valuation of ecosystem services</td>
<td>Cap-and-trade greenhouse gas programs</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Architecture</td>
<td>Mass transit; parks</td>
</tr>
<tr>
<td>Public awareness and pollution prevention</td>
<td>Marketing campaigns; voluntary programs</td>
<td>Composting and recycling programs; public service advertisements</td>
</tr>
</tbody>
</table>

First, government regulations can set effects-based or technology-based standards, demanding that harms do not surpass a specific threshold or requiring the use of certain technologies to reduce harm. This, to a significant extent, is the “classical” type of regulation and traditional focus of environmental law.

All environmental standards seek to reduce adverse effects in some way. Effects-based environmental standards, often referred to as “health-based” or “environment-based” standards, do so by expressly determining the level of environmental quality deemed acceptable as a goal. In establishing effects-based standards, we ask what level of environmental quality is adequate, or necessary, to protect health or environmental resources. The difficult part is deciding what is “adequate.”

For example, the Clean Air Act requires that the Environmental Protection Agency promulgate National Ambient Air Quality Standards for criteria air pollutants which “in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health.” Regulation can also require agencies to set and regulate entities to meet standards that available (or potentially available) technologies are capable of achieving.

example, when Congress passed the Clean Water Act, “it changed the primary focus of federal law from the harm visited on the receiving water stream segments to end-of-pipe, technology-based permit limits.”

“There is considerable debate . . . over the efficiency of prescriptive regulations.” On the one hand, they may be “inefficient and unwieldy,” providing “little incentive for innovation because once the regulated party has satisfied the necessary requirement[s], the law creates no incentive to reduce harmful activities further.” On the other hand, environmental regulation may encourage production-process and design innovations.

Second, the government may regulate through information generation and labeling. Such information-based approaches can inform society about environmental and public health harms. Providing information about the environmental consequences of actions can encourage better performance for government institutions, private entities, and individuals. The theory behind informational approaches “is that the government can change people’s behavior by forcing them to think about the harm they are causing and by publicizing that harm.” Information both guides government decisionmaking regarding how and whether to protect the environment, and motivates private cleanup and avoidance of environmental problems. Examples of informational regulation include the Energy Star energy efficiency labeling program, the Toxic Release Inventory, and the USDA Organic food labeling program. Informational regulation can be useful when political will inhibits direct regulation, and studies indicate that information can shape environmental norms. For instance, increased awareness of consequences of individual transportation behavior has a positive effect on willingness to reduce personal car use. However, it can be costly to produce accurate and verifiable information, and informational regulation does not require changes in consumer or corporate behavior.

Third, regulation can simply impose bans on certain harms that are unacceptable at any level. For example, in recent years, communities have instituted bans on plastic bags and smoking in public places.

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18. Id.
19. Id.
21. Salzman, supra note 17, at 373.
23. Salzman, supra note 17, at 373.
Internationally, for example, signatories of the Stockholm Convention on Persistent Organic Pollutants, to which the United States is not a party, agreed to outlaw “chemical substances that persist in the environment, bioaccumulate through the food web, and pose a risk of causing adverse effects to human health and the environment.”

Fourth, society can pursue market-based regulation that considers cost-benefit analysis, economic incentives (such as, subsidies), economic disincentives (such as, taxes), and valuation of ecosystem services. “[M]arket-based approaches, such as pollution charges and trading of pollution permits/credits, attempt to harness market forces to achieve equal or greater amounts of pollution control than prescriptive regulation in a more cost-efficient manner.” The European Union cap-and-trade permitting system, “a cornerstone of the European Union’s policy to combat climate change and its key tool for reducing industrial greenhouse gas emissions cost-effectively,” is one such example.

Market-based approaches, while currently popular, may prove challenging to implement. To the extent privatization is required, “environmental resources are not easily amenable to commodification,” and “normative concerns . . . rub against privatization of . . . environmental amenities in the public domain.” Financial penalties (such as, charges and taxes), however, increase the cost of polluting activities by discouraging pollution and waste and forcing the polluter to bear the costs of her activities. The challenges to this type of regulation include setting an appropriate penalty price and overcoming the political aversion to financial penalties and taxes. Rather than a stick, the financial payment can also function as a carrot in the form of payment or subsidy. Thus, one solution for the unpalatability problem for behavior-modifying regulation is to choose carrots versus sticks based on the level of public palatability of the regulation.

Fifth, governments at all levels, sometimes with the financial support of private entities, can spend money on infrastructure that improves environmental outcomes including mass transit, bike lanes, and public parks. Admittedly, such infrastructure is not “regulation” per se but to ignore its importance, in terms of both expense and the ability to shift

28. Salzman, supra note 17, at 368.
29. Id. at 370.
30. Id. at 371.
social norms, would be to leave a gap in any analysis for what approach might best alleviate the problems of an environmental harm.

Sixth, public awareness (that is, marketing campaigns) and pollution prevention (that is, recycling and composting programs) are regulatory tools that can often prove cheaper than end-of-the-pipe controls and lead to voluntary action.31

Again, the challenge is in determining which of the available regulatory tools will best abate the environmental or public health harm. And even if we can agree that emissions of a particular pollutant are too high, that grazing levels of the local commons must be reduced, or that a local endangered species requires greater protection, a fundamental choice still remains: We need to decide how best to achieve these goals.

Put another way, even if we agree on our starting point and end point, we still need to determine which path should take us there. Reliance on regulatory mandates? Market instruments? Pilot projects or information generation? Implementing environmental policy is where the rubber meets the road, and it has provided some of the most innovative policy instruments in all of American law.32

How have such decisions been made in New York City? Have they been successful?

II. “NEW YORK CITY RULES!”

PlaNYC is a strategic vision for the public health and environmental welfare of New York City and lays the basic groundwork for many of the initiatives discussed in this Article. This Part describes the wide variety of environmental and public health initiatives pursued by New York City in recent years, providing a broad overview of New York City initiatives as a whole with a greater focus on overall goals.

It seems that not a week went by without another “crazy” initiative coming out of New York City. The headlines speak for themselves:

• Bloomberg’s Parting Gift for NYC: Mandatory Composting33
• For Bloomberg and Bike-Sharing Program, the Big Moment Arrives34
• Detroit’s Richard Bernstein to NYC Mayor Bloomberg: Big Gulps Don’t Hurt People, Bicycles Do35

32. Salzman, supra note 17, at 363.
34. Matt Flegenheimer, For Bloomberg and Bike-Sharing Program, the Big Moment Arrives, N.Y. TIMES, May 27, 2013, at A13.
This list of headlines is just the tip of the iceberg. The New York City Council and Mayor Bloomberg, not without criticism, pursued a variety of ambitious public health and environmental regulations to improve the city’s quality of life. Some of these regulations, like congestion pricing, experienced failure, while others were perceived as successes, like smoking regulation. Meanwhile, others, like the ban on large sugary drinks and the installation of Citi Bike, received widespread press. These categories of regulations are not mutually exclusive. These New York City rules, both those proposed and actually implemented, include bans (foam containers, sugary drinks, smoking in public spaces, trans fat, displaying tobacco products); informational regulation (displaying food calorie information); education (marketing campaign about dangers of excess drinking); infrastructure (salad bars in schools, public space recycling, bike lanes, tree planting); pollution prevention (e-waste recycling); standard-setting (energy efficient building standards); and economic (dis)incentives (congestion pricing). These specific New York City initiatives match the


41. See Jim Dwyer, The Impossible Mayor of the Possible, N.Y. Times, Aug. 16, 2013, at MB4 (“He led the country—indeed, the world—in taking strong measures to reduce carbon emissions, anticipating that the city’s population would grow by one million in the decade after he left office; meanwhile, he flew everywhere on private jets, the least carbon-efficient form of transportation on or above the earth, whether going to spend weekends at his house in Bermuda, or to lecture at a climate change conference in Copenhagen.”).
taxonomy described in Table 1 above. Although, as seen in Table 2 below, many others could have been discussed in greater detail.

**Table 2: New York City Examples of Regulatory Approaches**

<table>
<thead>
<tr>
<th>Type</th>
<th>New York City Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard-setting</td>
<td>Green zoning</td>
</tr>
<tr>
<td>Information</td>
<td>Menu calories information</td>
</tr>
<tr>
<td>Bans</td>
<td>Sugary drinks; vending machines in schools; smoking or tobacco; styrofoam</td>
</tr>
<tr>
<td>Market-based</td>
<td>Congestion pricing</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Citi Bike; salad bars in schools</td>
</tr>
<tr>
<td>Public awareness and pollution prevention</td>
<td>Composting; recycling programs</td>
</tr>
</tbody>
</table>

Due to the sheer number of initiatives proposed by the audacious PlaNYC and proposed by New York City public officials, this Part, through its discussion of the various categories of environmental and public health reform, focuses in particular on initiatives in urban transportation and food systems that generated serious public discussion. Five examples of the regulatory approaches to be explored include (1) the market-based congestion pricing plan for Lower Manhattan (passage of which failed); (2) the Citi Bike infrastructure; (3) the proposed “Sugary Drink” ban; (4) the informational calorie labeling on food menus; and (5) the emerging compost pollution prevention plan.

### A. PlaNYC and GreeNYC

In light of global environmental problems with no forthcoming international or national solutions, “local environmental law” has proliferated in an attempt to improve quality of life for individuals and their communities while simultaneously seeking to address global environmental concerns. Such “local environmental law” often pursues such change through the regulation of individual behavior and activities associated with living our daily lives.

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42. I did not analyze a New York City initiative from the “standard-setting” category as this is the most traditional form of regulation as opposed to the alternative forms of regulation now being pursued by local governments.

Consistent with the increased focus on local environmental action, on Earth Day 2007, New York Mayor Bloomberg unveiled PlaNYC, an “environmental blueprint” containing more than 100 initiatives for a greener city.44

Some individual cities have been especially proactive. New York has won considerable recognition for its long-term growth and sustainability plan, PlaNYC 2030. This aims to reduce greenhouse-gas emissions by 30% from 2005 levels over the next 20 years—roughly the same as the US federal government’s goal of reducing the country’s emissions by 28% from 2005 levels by 2020. Because nearly 80% of New York City emissions come from buildings, the New York plan includes compulsory energy audits of city and commercial buildings of more than 4,645 square metres (50,000 square feet).

PlaNYC is a comprehensive strategic plan for the greater New York City area. A revised version of the plan was published in April 2011.46 The 202-page plan, published by the city of New York and Mayor Bloomberg, lays out a general plan and specific initiatives in ten particular areas: housing and neighborhoods; parks and public spaces; brownfields; waterways; water supply; transportation; energy; air quality; solid waste; and climate change.

PlaNYC embraces large-scale changes in infrastructure and policy, and supports smaller scale action, as evinced by GreeNYC. GreeNYC is a program and website “dedicated to helping New Yorkers rise to the challenge of making our city greener and greater” by “reducing their energy use, choosing a more sustainable lifestyle, and taking small actions that will help shrink the citywide carbon footprint and improve environmental quality.”48 It is a classic example of public awareness marketing that encourages New Yorkers to live more sustainable lives and offering tips to do so. For example, the website uses a mascot, “Birdie,” to promote green lifestyle tips for home, work, and travel, such as fully loading the dishwasher and using natural light at work.

PlaNYC itself addresses the basic overview of the specific initiatives proposed by Mayor Bloomberg and discussed in this Article. In promoting congestion pricing, a PlaNYC report states that “[t]o reduce congestion on our roads, bridges, and airports we will pilot technology

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47. Id. at 170.
49. Id.
and pricing-based mechanisms,”\textsuperscript{50} and that “[t]ools like pricing and intelligent transportation systems technology enable us to better manage physically constrained assets by encouraging drivers to shift their trips away from the most congested travel times.”\textsuperscript{51}

Bike-sharing in New York City, now known as Citi Bike, is also heavily promoted. “Continued expansion of the bike network, initiatives for bike parking, education, and implementation of a bike-sharing program will be needed to offer this alternative to more New Yorkers and achieve our goal of doubling bicycle commuting from 2007 levels by 2012 and tripling it by 2017.”\textsuperscript{52} The Plan lays out some future details as well.

Through bike-sharing, bicycles are made available to riders at kiosks for a small fee. When Paris installed its bike-sharing program, cycling quadrupled in one year. Bike-sharing will enable New Yorkers and visitors to check out bikes for short trips for a nominal cost, or for free if the trip is fewer than 30 minutes. We will partner with a third-party operator to establish a robust bike-sharing program in the city.\textsuperscript{53}

The Plan goes to great lengths to sing the praises of bike-sharing in the world cities of Western Europe. Bike-sharing makes it easy to get around and eliminates the need to find bike parking. Users can take a bike from one kiosk and drop it off at another. New York, like London, is a dense, multi-modal city, and New Yorkers and visitors alike would benefit from traveling across the city on two wheels. By 2012, New Yorkers will be able to get an annual membership to a bike-sharing program for less than the cost of a monthly MetroCard.\textsuperscript{54}

However, not all PlaNYC initiatives are handled and implemented with such detail. For example, trash presents an enormous problem for New York City. Composting is a clear path to improvement, but laying out the problem and recognizing the need for a solution is far different than actually devising a way to compost the organic waste of over 8 million New York City residents and businesses. The basic goal is lofty.

To reduce the amount of organic material we send to landfills, we will expand opportunities for community-based composting and encourage commercial food waste recovery operations. Advances in technology will also allow us to pursue alternative disposal methods by safely and efficiently converting our waste into a source of clean energy.\textsuperscript{55}

\textsuperscript{50} PlaNYC, supra note 46, at 91.
\textsuperscript{51} Id. at 95.
\textsuperscript{52} Id. at 94.
\textsuperscript{53} Id. at 94–95.
\textsuperscript{54} Id. at 95.
\textsuperscript{55} Id. at 137.
But existing opportunities for composting are nearly absent, except for a few noble community-run programs. For example, New York’s sanitation operations pale in comparison to San Francisco’s Recology Program.\[^56\]

New Yorkers have several options to compost their food waste. Many community-based organizations accept food waste for small-scale composting. GrowNYC hosts drop-off locations for organics at select Greenmarkets, and residents with yards can use small containers to compost kitchen scraps along with their yard waste. For nearly 18 years, the City has also operated the NYC Compost Project, which offers outreach and education about composting for residents, non-profit organizations, and businesses at botanical gardens and non-profits in each borough.\[^57\]

Since a curbside composting collection pilot program in the early 1990s was deemed inefficient and costly, an efficient composting program model has yet to be developed for New York City.\[^58\]

B. NEW YORK CITY TRANSPORTATION

Given the significant traffic congestion, especially in Lower Manhattan, the City of New York pursued a number of transportation initiatives during the Bloomberg mayoral administration. Ideas and proposals to confront the congestion problem included bike parking,\[^59\] hybrid taxicabs,\[^60\] car-sharing,\[^61\] creating more bicycle lanes, an ill-fated anti-idling ordinance, and banning cars in Central Park during the summer.\[^62\]

The mayor fought a war of attrition with the automobile. He sought to transform bicycling from a recreational activity into a real alternative to cars. By 2013, the city had added about 450 miles of bike lanes carved mostly from the city’s roadways. Some curbs and medians were installed to separate pedalers from cars, but many of the lanes were


\[^57\] PlaNYC, supra note 46, at 140 (“We will expand outreach and education efforts, benchmark and quantify current community-based composting efforts, and work with community and government partners to increase the number of available drop-off locations for food waste. In addition, we will launch a grant program for small-scale composting to encourage diversion of food waste.”).

\[^58\] Id. at 141 (“The City piloted curbside collection for organics in the early 1990s and found that while it did increase diversion rates in lower-density neighborhoods, it was not a cost-effective collection method. Although the disposal costs were lower for organics than refuse, each collection truck only picked up a small amount of organics on their route, which resulted in a high collection cost per ton. Since 20 years have passed, we will reexamine this issue and complete a new study to determine the feasibility of curbside organics recycling.”).


\[^60\] Press Release, City of N.Y., Mayor Bloomberg Announces Taxi Fleet to Be Fully Hybrid by 2012 (May 22, 2007).


demarcated simply with painted asphalt, much as blue paint divided automobiles from pedestrians along sections of Times Square and Broadway. Mr. Bloomberg lost his most ambitious offensive against cars when the State Legislature defeated his plan for “congestion pricing” in 2008, but he doubled down on biking with a popular bike-sharing system this year.95

The following Subpart discusses two of the more controversial initiatives. First, it discusses Citi Bike, the newly implemented and fast-growing bike-sharing program, and second, it discusses Manhattan’s congestion pricing plan that ultimately failed.

1. Citi Bike

New York City engaged in a significant infrastructure initiative with its Citi Bike program. As a result, the summer of 2013 was when bicycles took over New York City.64 The genesis of the program began earlier, though with significant speed considering the size of the city. On November 23, 2010, the New York City Department of Transportation released a Request for Proposals (“RFP”) to private companies to fund a City Bike Share System.65 The RFP called for a single private company to fund the program entirely for the first five years while sharing profits with the city.66

On September 14, 2011, Transportation Commissioner Janette Sadik-Khan announced the selection of Alta Bicycle Share to run the bike-share program.67 Citi Bike is now operated by NYC Bike Share, LLC, a subsidiary of Motivate.68 Alta, along with the Public Bike System Company, operate bike-share systems in Washington, D.C., Boston, Melbourne, Chattanooga, Toronto, Seattle, Arlington, and Columbus.69 Citibank paid $41 million to be the lead sponsor of the initiative for five years.70

66. Id.
69. Id.
Citi Bike was initially set to open in July of 2012, as specified in its contract with Motivate.71 However, on August 17, 2012, Mayor Bloomberg and the Transportation Department announced that due to software issues Citi Bike would not open until March of 2013 with 7000 bikes and 420 stations.72 The system initially aimed to have 10,000 bikes and 600 stations73 expanding into the Upper East and West Sides, Long Island City, Sunnyside, Park Slope, Cobble Hill, and Crown Heights.74

Citi Bike opened on May 27, 2013 for annual members; all other users were allowed to use the system one week later.75 The Citi Bike bicycle-share network achieved “high enrollment (two million trips in its first seventy-six days) and extremely low injury rates (eight during the same period).”76 Starting April 15, 2013, riders could sign up online in order to receive their Citi Bike key before opening day; the first 5000 people received a “founding member” key.77 Annual membership fee is $95, or approximately twenty-five cents per day for unlimited rides of forty-five minutes or less.78 When the system opened, it immediately became the largest bike share system in the country, with 6000 bikes and 330 stations.79 The service area on opening day included Manhattan below 59th street, Brooklyn Heights, DUMBO, Fort Greene, Clinton Hill, and Bedford Stuyvesant.80

A poll on August 16, 2012 showed that seventy-four percent of New Yorkers thought that a bike-share program was a good idea,81 and, as discussed in Part III below, New Yorkers remain positive about Citi Bike. That said, the New York City Department of Transportation (“DOT”) has received various complaints, mostly in the form of

72. Id.
73. Id.
79. Id.
80. NYC DOT, supra note 75.
NIMBY-esque\textsuperscript{82} reactions to kiosk placement. Washington Park residents, while not opposed to the bike-share system itself, complained the Citi Bike kiosks, with their conspicuous Citi logos, stood in stark contrast to the neighborhood’s historic character.\textsuperscript{83}

One particularly controversial kiosk in SoHo’s Petrosino Square sparked protests from both the Parks Department and local artists.\textsuperscript{84} The Parks Department claimed that a large thirty-two-bike kiosk was inappropriate for the relatively small park, and artists complained that the kiosk would interrupt art displays and performances in the Square.\textsuperscript{85}

New York City bicycle rental shops are divided on Citi Bike’s impact on their businesses.\textsuperscript{86} Some rental businesses report higher ridership inspired by Citi Bike and insist that Citi Bike, which is designed for short trips, does not compete with companies built upon bike touring.\textsuperscript{87} Other shops reported that rentals decreased by fifty percent from last summer.\textsuperscript{88} Long-term effects remain to be seen.

The tabloid paper \textit{New York Post} has been particularly critical of the program, highlighting stories such as a software glitch at a kiosk outside of Grand Central Station and a rider suffering from a flat tire.\textsuperscript{89} Also, a \textit{New York Daily News} reporter gave the bikes a negative review, strangely criticizing the slow speed and “sturd[iness]” of the bikes while acknowledging the reasons for these design features.\textsuperscript{90} Despite the criticisms and glitches, ridership is increasing; on August 6, 2013, Citi Bike averaged over seven rides per bike.\textsuperscript{91} In comparison, London has never surpassed six rides per bike.\textsuperscript{92}

\begin{itemize}
  \item \textsuperscript{82} NIMBY stands for “Not-In-My-Back-Yard.”
  \item \textsuperscript{83} Michelle Manetti, \textit{Washington Park Residents: Bike Share Is an Affront to ’History’} (June 8, 2012, 3:11 PM), http://fort-greene.thelocal.nytimes.com/2012/06/08/washington-park-residents-bike-share-location-is-wheely-bad/.
  \item \textsuperscript{84} Pete Donohue et al., \textit{Transportation Department’s Bike-Docking Station at Petrosino Square Sparks Protest}, \textit{N.Y. Daily News} (May 9, 2013, 12:34 PM), http://www.nydailynews.com/new-york/bike-share-registrations-roll-article-1.1339319.
  \item \textsuperscript{85} Id.
  \item \textsuperscript{86} Alex Goldmark, \textit{Does Citi Bike Hurt or Help Local Bike Rental Companies?}, WNYC (Aug. 5, 2013, 4:00 AM), http://www.wnyc.org/blogs/transportation-nation/2013/aug/05/does-citi-bike-hurt-or-help-local-bike-rental-companies/.
  \item \textsuperscript{87} Id.
  \item \textsuperscript{88} Id.
  \item \textsuperscript{89} Yasmine Phillips & Antonio Antenucci, \textit{An Endless Cycle of Problems for Citi Bike Share Program}, \textit{N.Y. Post} (June 3, 2013, 4:00 AM), http://nypost.com/2013/06/03/an-endless-cycle-of-problems-for-citi-bike-share-program/.
  \item \textsuperscript{91} Brad Aaron, \textit{Citi Bike Cracked Seven Trips Per Bike Yesterday (That’s a Lot)}, \textit{StreetsBlog NYC} (Aug. 7, 2013), http://www.streetsblog.org/2013/08/07/citi-bike-cracked-seven-trips-per-bike-yesterday-thats-a-lot/.
  \item \textsuperscript{92} Id.
\end{itemize}
To complement Citi Bike with further infrastructure, Bloomberg has added over 255 miles of bike lanes throughout his term as mayor. The DOT is still actively constructing new bike lanes and has announced concrete plans for several new routes uptown. In a New York Times poll, conducted in August of 2012, sixty-six percent of New Yorkers thought that bike lanes were a good idea. Concern over reduced on-street parking appears to be the primary argument against bike lane expansion.

All of the 2013 mayoral candidates had either remained silent on bike lanes or expressed interest in removing some of the lanes. Candidate Christine Quinn stated that the bike lane issue was polarizing such that it is “in the category of things you shouldn’t discuss at dinner parties.” New York City Mayor Bill de Blasio, elected in 2014, favors the bike lanes and promotes their expansion.

2. Congestion Pricing

Congestion pricing fits into the market-based regulatory category discussed above, and has been often discussed as an option to improve quality of life and lessen traffic in Manhattan. Manhattan, particularly south of 60th Street, is New York City’s commercial heart and experiences an exceedingly high volume of motor vehicle traffic negatively impacting air quality, public safety, commerce, and traffic flow. According to PlaNYC, congestion costs the city $13 billion per year in lost economic output. Thus, to improve quality of life and reduce traffic congestion, Mayor Bloomberg and New York City proposed a congestion pricing initiative for Manhattan. Ultimately, the plan was defeated by the New York State legislature, and, as of the publication of this Article, no congestion pricing plan has been implemented in New York City. This “ambitious federally-funded local initiative to reduce vehicle congestion . . . failed due to political

95. Grynbaum & Connelly, supra note 93.
96. Feeney et al., supra note 94.
98. Id.
100. PlaNYC, supra note 46, at 95.
complications,” even though economists have called congestion pricing the “single most viable approach to reducing traffic congestion.”

“Federal funding has been made available for urban centers through [U.S. DOT’s] Congestion Initiative, which sponsored the 2007 Urban Partnership Agreement to help fund select” cities’ implementation strategies for reducing congestion. New York City’s congestion pricing scheme was one of the transportation bullet points announced on April 22, 2007 as part of Bloomberg’s PlaNYC. It was meant to alleviate congestion in the Central Business District (“CBD”).

On April 22, 2007 (Earth Day), Mayor Bloomberg unveiled his PlaNYC which, among other greenhouse gas-reducing initiatives, spotlighted a three-year pilot congestion pricing program to cover all of Manhattan south of 86th Street. According to 2007 PlaNYC, the congestion pricing program would work as follows:

- Passenger vehicles entering or leaving Manhattan below 86th Street during the business day (weekdays 6 am to 6 pm)—with the exception of the FDR Drive, the West Side Highway, and West Street—would pay an $8 daily fee. Trucks would pay $21. Autos that drive only within “the Zone” would pay half price. The charge would apply to all vehicles, except emergency vehicles, those with handicapped license plates, taxis, and for-hire vehicles (radio cars).

- Vehicles using E-Z Pass that travel through MTA or Port Authority (PA) tolled crossings on the same day would pay only the difference between their MTA or PA tolls and the congestion charge, so that drivers don’t have an incentive to detour across free bridges. Because roads on the periphery of Manhattan will not be in the Zone, trips around the Zone (for example, from Harlem to Brooklyn) would not be charged.

Due to the political failure discussed below, congestion pricing was removed entirely from the 2011 PlaNYC.

Criticism of Mayor Bloomberg’s plan, as one might expect, was significant, including complaints that the plan was unfair to lower-income individuals that travel by car into Manhattan or that border areas (such as, north of 86th Street or Brooklyn) would become virtual parking

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102. Kogut, supra note 99, at 89.
103. Schwartz et al., supra note 101, at 589.
105. Id.
Some New York City residents found congestion pricing “insan[e]” or “appalling” right from the beginning, particularly those commuting within the boundaries of their own hometown.

“On June 22, 2007, the New York City Department of Transportation, New York Metropolitan Transportation Authority, and the New York State Department of Transportation submitted a proposal to the DOT’s Urban Partnership Program.” 109 “[T]he federal government then selected New York City’s proposal, and agreed to commit over three hundred and fifty million dollars to fund congestion pricing.”

The mayor was required, under both state law and the agreement with the U.S. DOT, to garner enough political support for state approval because “[w]ithout State approval, New York City could not receive UPA support.” 111 In the summer of 2007, pursuant to state legislation, the governor and state legislature formed the independent New York City Traffic Congestion Mitigation Commission (“Commission”). 112 The Commission was charged with evaluating different congestion pricing proposals, including PlaNYC, and to submit a comprehensive traffic mitigation plan by January 2008 that would reduce vehicles miles traveled

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107. Some called the plan inequitable, targeting the poor that commute by car into Manhattan, although very few lower-income people travel by car into Manhattan thanks to New York City’s extensive transit system.


111. Schwartz, supra note 101, at 592; see also Kogut, supra note 99, at 91 (“Notwithstanding the constitutional and statutory authorization to regulate its streets, the City lacks the ability to ‘pass, enforce or maintain any ordinance, rule or regulation requiring from any owner of a motor vehicle or motorcycle . . . any . . . fee . . . for the use of the public highways.’ Given this lack of authority, the City is dependent upon a delegation of authority from the Legislation to charge vehicles a fee to enter the congested core of Manhattan (or implement congestion pricing).”). But see Roderick M. Hills, Jr., NYC Doesn’t Need Albany’s Permission to Enact Congestion Pricing, StreetsBlog NYC (July 16, 2012), http://www.streetsblog.org/2012/07/16/nyc-doesnt-need-albany’s-permission-to-enact-congestion-pricing/ (arguing that the city already has the right to pursue congestion pricing without State approval under section 1642(a)(4) of the New York Vehicle and Traffic Law, which grants cities with one million or more people the right to impose “tolls, taxes, [and] fees . . . for the use of the highway or any of its parts where the imposition thereof is authorized by law,” and that as long as the City Council enacts a local law defining the toll, the city may pass a congestion pricing scheme independent of Albany).

112. 2007 N.Y. Laws Ch. 384; see also Kogut, supra note 99, at 93–94.
(“VMT”) south of 86th by 6.3% (the same figure as Bloomberg’s plan). The congestion pricing plan passed the Commission by a thirteen-to-two vote.

On January 31, 2008, the Commission released its final recommendation for a congestion pricing plan similar to the one proposed by Mayor Bloomberg, but slightly scaled back with a northern border at 60th Street, an elimination of intra-zonal charges, and several other provisions.

The Commission’s proposed plan would have changed the northern boundary to 60th Street, and charged cars $8 for inbound trips only during the same hours. Regular trucks would still be charged $21, but low-emission trucks would pay only $7. Drivers would pay only once during the day and could make unlimited trips in and out of the zone.

The plan expected to generate $491 million per year and was met with significant support from many progressive organizations.

On March 31, 2008, the City Council approved the congestion pricing bill (with the Commission modifications), passing by a slim margin of thirty to twenty. At the time, the plan enjoyed the support of Governor David Paterson and Senate Majority Leader Joseph Bruno, but was questioned by Assembly Speaker Sheldon Silver.

The Plan died in the New York State Assembly on April 7, 2008 behind closed doors. “[D]espite [significant] public support . . .

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116. Id.

117. Id.

118. Id.

119. Id.

120. Id.


123. Cardwell, supra note 121.

124. Nicholas Confessore, $8 Traffic Fee for Manhattan Gets Nowhere, N.Y. Times (Apr. 8, 2008), http://www.nytimes.com/2008/04/08/nyregion/08congest.html (quoting Assembly Speaker Silver as saying, “[t]he congestion pricing bill did not have anywhere near a majority of the Democratic conference, and will not be on the floor of the Assembly”); see also Kogut, supra note 99, at 95.
polls showed New York City voter support at sixty-seven percent and statewide support at sixty percent if the revenue was funneled to transit), the Assembly defeated the measure with a non-vote. There was widespread opposition from Democratic members of the Assembly, most notably those from Queens, Brooklyn, and New York City suburbs “who viewed the proposed congestion fee as a regressive measure that overwhelmingly benefitted affluent Manhattanites.” The Democrats in Assembly refused to put the bill to a public vote, despite then-Governor Paterson’s last-minute efforts to save the plan, and despite the overwhelming support of congestion pricing by scholars and policymakers.

“As a result, the UPA money was redirected to Chicago and Los Angeles (with the addition of Fiscal Year (FY) 2008 funds) to fund plans less ambitious than New York’s.” New York was meant to receive $354.5 million in federal funding to reduce traffic. As a condition, the city would have to contribute $200 million for the congestion pricing scheme itself. As of April 2008, $153 million of the money was given to the city of Chicago to create a bus rapid transit system. The city of Los Angeles also received a portion of the federal funding set aside for New York to implement their own congestion pricing scheme, the High

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126. Confessore, supra note 124; see also Millard, supra note 76, at 34 (“Indeed, outer-borough opposition helped doom Bloomberg’s 2008 congestion-pricing plan in the State Assembly. Opponents played up the ‘Manhattan elitist’ aspect of charging drivers for a previously unpriced privilege, despite Tri-State Transportation Campaign studies pointing out that drivers have up to twice the income of non-drivers.”)


128. Michael H. Schuitema, Comment, Road Pricing as a Solution to the Harms of Traffic Congestion, 34 TRANSPI. L.J. 81, 106–07, 112 (2007) (noting that the question is not whether congestion pricing will work, but whether there is enough public and political support to start the scheme, that inequity concerns are overstated especially since rebates could be provided for certain categories of commuters, and suggesting that congestion pricing revenue could be allocated to improve social benefits and that phasing in with trucks first will be more likely accepted since they cause disproportionately more air pollution, infrastructure damage, and road congestion).

129. Schwartz et al., supra note 101, at 595.


131. Neuman, supra note 110.

132. Naparstek, supra note 130.
Occupancy Tool Lanes ("HOT Lanes"). Los Angeles’s HOT Lane program has attracted more than twice the number of expected drivers, and will generate between $18 million and $20 million per year for mass transit.

Former Transportation Commissioner, Sam Schwartz, recently advanced a new congestion pricing plan called MoveNY. Bloomberg endorsed this plan in his post-Sandy resiliency report. Schwartz argues that his plan is more equitable than the Bloomberg’s original plan because it would lower the tolls on inter- and intra-borough crossings not located in lower Manhattan in addition to raising tolls on drivers entering Lower Manhattan’s Business District. A portion of the tolls would go directly to road improvements. The four East River Bridges would have a $7 toll and a $5 E-ZPass toll, while the Verrazano, the RFK, and the Bronx Whitestone Bridge would be cheaper. As expected, the political support appears mixed, but this new plan may be more successful as it would be much more comprehensive, including the construction of three large pedestrian bridges.

The congestion pricing fight seems to have left a bad taste in the mouths of New York City voters, causing 2013 mayoral candidates to largely avoid the congestion pricing issue. Notably, City Council Speaker and mayoral candidate Christine Quinn, a staunch advocate of congestion pricing since 2007, recently expressed that the issue was unlikely to come “back around” and that “[it] is just not going to happen.” Despite this proclamation, public policy advocates in New York City and the de Blasio administration alike are exploring more innovative congestion pricing and traffic reduction ideas and proposals,

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134. Id.
136. Id.
137. Id.
138. Id.
140. Id.
even though Mayor de Blasio clearly does not support the Bloomberg proposal.

C. THE NEW YORK CITY URBAN FOOD SYSTEM

In recent years, New York has also done much to improve food issues in the city as they relate to public health, and, like environmental law scholarship, have started to appreciate the link between environmental health and public health. This is especially true when it comes to children, schools, and food, even though the city and state lag behind in developing a more sustainable local food system (such as, community supported agriculture, farmers markets, and quality available produce). For example, Bloomberg promoted the “New York City School Salad Bar Initiative” which removed soda machines and provided salad bars to elementary schools across the city’s five boroughs. In January 2010, Bloomberg unveiled a plan to cut the amount of salt in packaged and restaurant food by twenty-five percent over a five-year period. In 2006, the New York City Board of Health approved Bloomberg’s plan to ban trans fat in cooking oils and gave restaurants eighteen months to make the change, which may have led the way for an FDA trans fat ban. However, nothing proved more controversial than the proposed sugary drink ban, or more ubiquitous than food calorie labeling on menus. At the same time, composting in New York City and its schools is seeing significant support as well.

1. Sugary Drinks

The impacts of sugar and obesity are often underestimated, and scholars are beginning to discuss serious regulation of sugar, similar to


144. Press Release, City of N.Y., Mayor Bloomberg and Whole Foods Market Open New Store and Announce Donation of 57 Salad Bars to City Public Schools as Part of City’s New Plan to Install Salad Bars in All Schools (Aug. 23, 2012).


With New York already experiencing significant tobacco regulation, Mayor Bloomberg proposed a ban on the sale of sugary drinks in containers larger than sixteen ounces as part of a larger plan to combat obesity. Bloomberg stated that “[t]his year, for the first time in the history of the world, more will die from too much food than from too little food.” He categorized the proposed ban as a gentle “remind[er]” to consumers; “if you want to have 32 ounces, just buy two 16 ounce cups.” He also sought to categorize it as “portion control” rather than a “ban.”

The ban would have only included establishments that received health department grades; supermarkets, convenient stores, and vending machines would be excluded. Refills were not to be banned and failure to comply would have led to a $200 fine. A sugary beverage was categorized as a drink with more than twenty-five calories per every eight ounces; the definition did not include juices and smoothies that are more than seventy percent fruit, drinks with more than half milk, alcoholic beverages, or calorie-free diet sodas.

On September 13, 2012, the New York City Board of Health voted unanimously (with one abstention) to ban the sale of sugary drinks in containers larger than sixteen ounces. The Board of Health was the only regulatory approval needed to pass the ban, as reprinted below:

§ 81.53. Maximum Beverage Size.

(a) Definition of terms used in this section.

(1) Sugary drink means a carbonated or non-carbonated beverage that:

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152. Id.
153. Id.
155. Id.
(A) is non-alcoholic;
(B) is sweetened by the manufacturer or establishment with sugar or another caloric sweetener;
(C) has greater than 25 calories per 8 fluid ounces of beverage; and
(D) does not contain more than 50 percent of milk or milk substitute by volume as an ingredient.
The volume of milk or milk substitute in a beverage will be presumed to be less than or equal to 50 percent unless proven otherwise by the food service establishment serving it.

(2) Milk substitute means any liquid that is soy-based and is intended by its manufacturer to be a substitute for milk.
(3) Self-service cup means a cup or container provided by a food service establishment that is filled with a beverage by the customer.

(b) Sugary drinks. A food service establishment may not sell, offer, or provide a sugary drink in a cup or container that is able to contain more than 16 fluid ounces.

(c) Self-service cups. A food service establishment may not sell, offer, or provide to any customer a self-service cup or container that is able to contain more than 16 fluid ounces.

(d) Violations of this section. Notwithstanding the fines, penalties, and forfeitures outlined in Article 3 of this Code, a food service establishment determined to have violated this section will be subject to a fine of no more than two hundred dollars for each violation and no more than one violation of this section may be cited at each inspection of a food service establishment.159

On March 11, 2013, the day before the soda ban was meant to take effect, a New York Supreme Court Judge (trial level) overturned the ban.160 Supreme Court Justice Milton Tingling called the proposed regulations “arbitrary and capricious.”161 He found that the Board of Health had overstepped its authority to protect against and prevent diseases, because they did not have the authority to “limit or ban a legal item under the guise of ‘controlling chronic disease.’”162 Further, he noted that the ban would not apply equally across eating establishments: convenience stores and supermarkets would be exempt as well as sugary milk products.163

161. Id. at 1.
162. Id. at 16.
163. Id. at 6.
On July 30, 2013, the New York State Supreme Court, Appellate Division concurred with the lower court. It held that while they had the authority to ban “inherently harmful” foodstuffs from consumption in the general public, sugary drinks do not fall into that category. However, the Bloomberg administration appeared to be undeterred, referring to the Appellate Division decision as merely a “temporary setback.” The Board of Health unsuccessfully appealed the decision.

The “soda ban” has faced myriad criticisms. Some accuse Bloomberg of selective enforcement because, for example, “[a] Starbucks twenty-ounce drink can have more than 500 calories, but will be exempt from the ban because it contains more than 50% milk.” Others complained that the soda ban is too targeted for such a broad issue as obesity. Also, conservatives have derided the ban as “fascist” and Bloomberg as a “nanny.”

Kirsten Witt Webb, a spokesperson for Coca-Cola sought to cast Bloomberg as paternalistic: “The people of New York City are much smarter than the New York City Health Department believes.”

Starbucks went so far as to refuse to change any of their offerings to meet the requirements of the ban the day before the ban was to take effect.

Brian Wansink and David Just, health scientists quoted frequently by the Bloomberg administration in support of the ban, wrote

165. Id. at 211 (stating that the Health Board is designed to protect the public from “inherently harmful matters,” but that “soda consumption cannot be classified as a health hazard per se”).
169. Id.
170. Id.
172. Ashley Lutz, Starbucks Refuses to Follow NYC Sugary Drink Ban—Mayo...
not only that Bloomberg has misinterpreted their findings but also that the ban would backfire for New York City Public Health. 173

2. Calorie Menu Labeling

New York City’s calorie labeling on menus measure (in the category of informational regulation) was designed to combat the increased instances of obesity in New York City. The Public Notice of Adoption cited a series of statistics demonstrating the severity of the obesity epidemic: the obesity rate of U.S. adults has more than doubled over the past thirty years; the cases of diabetes have doubled; more than half of the adults in New York City are overweight and one in six is obese; twenty-one percent of New York City kindergarten students are obese.174

Calorie labeling was also meant to address the issue of “away from home” food consumption.175 Statistics from the Public Notice document include: children eat nearly twice as many calories when they eat out, as compared to when they eat at home; the average American consumes one third of their calories from restaurant food; from 1970 to 2006, the percentage of food dollars spent on eating out nearly doubled, from twenty-six percent to forty-eight percent.176

Finally, these New York Rules are meant to bring the success of the Nutrition Labeling and Education Act (“NLEA”) to restaurants.177 The Department of Health first demonstrated that food labeling is an effective strategy to inform consumers (three-quarters of Americans use food labeling and forty-eight percent report that they have changed their eating habits as a result).178 They then identified the inadequacy of current efforts of those restaurants that make caloric information publicly available: restaurants most often hide the information on placemats under food, or on food wrappers only accessible after the purchase is made.179

They further added that nine out of ten people underestimate the caloric value of unhealthy foods by approximately fifty percent.180 Those same people chose unhealthy foods twenty-four percent to thirty-seven

175. Id.
176. Id.
177. Id.
178. Id.
179. Id.
percent less when given the calorie information. Additionally, the American Heart Association, along with others, issued a statement in support of menu labeling.

“On September 26, 2006, the New York City Department of Health proposed the nation’s first menu labeling law, Regulation 81.50 . . . designed to primarily impact large, chain restaurants.” On December 5, 2006, the New York City Board of Health voted to amend its health code to require restaurants that make calorie information publicly available to post it on menus and menu boards, where it is easily visible to consumers when they order, by March 1, 2007.

Following a successful legal challenge to the applicability wording of initial regulations, the New York City Board of Health voted to amend the health code to require the posting of calorie information for all restaurants with 15 or more locations nationwide that serve a standardized menu. In upholding the revised law, Judge Holwell stated, “It seems reasonable to expect that some consumers will use the

185. The New York State Restaurant Association challenged the regulation in New York State Restaurant Ass’n v. New York City Board of Health (NYSRA I) and emerged victorious when the court declared the regulation preempted by the Nutrition Labeling and Education Act of 1990 (“NLEA”), N.Y. State Rest. Ass’n v. N.Y. Bd. of Health, 509 F. Supp. 2d 351, 355 (S.D.N.Y. 2007).
186. See Green, supra note 184, at 735 (“The Restaurant Association promptly challenged the new regulation, alleging that it was preempted under the NLEA and unconstitutional under the First Amendment of the United States Constitution. In New York State Restaurant Ass’n v. New York City Board of Health (NYSRA II), Judge Holwell of the Southern District of New York upheld the regulation. Although the Restaurant Association appealed, the United States Court of Appeals for the Second Circuit affirmed the district court’s holding on February 17, 2009, in New York State Restaurant Ass’n v. New York City Board of Health (NYSRA III). Ultimately, by upholding Regulation 81.50, the NYSRA II and III courts provided a foundation for the enactment of similar legislation in other jurisdictions and stimulated a nationwide debate over the proper role of government in addressing America’s growing obesity crisis.”).
information” on menus and menu boards “to select lower-calorie meals.”\(^{187}\) The revised code reads as follows:

§ 81.50 Calorie labeling.

(a) Scope and applicability. This section shall apply to menu items that are served in portions the size and content of which are standardized and for which calorie content information is made publicly available on or after March 1, 2007, by or on behalf of the food service establishment serving the items.

(b) Calorie information for menu items. Food service establishments shall post on menu boards and menus the calorie content values (in kcal) that have been made publicly available as specified in subdivision (a) for each menu item next to the listing of each menu item. Posted calorie content shall be calculated in accordance with 21 CFR §101.9(c)(1)(i) or its successor regulation. Subject to prior approval by the Department, food service establishments may use alternative means for making calorie information available to patrons, provided such information is made available at the point of purchase and is at least as prominent as required in paragraph (1) below.

1. Menu boards and menus. The term “calories” or “cal” shall appear as a heading above a column listing the calorie content value of each menu item, or adjacent to the calorie content value for each menu item, in the same or larger typeface as the calorie content values for individual menu items.

   (A) Menu boards. On menu boards, calorie content values shall be posted in a size and typeface at least as large as the name of the menu item or price, whichever is larger.

   (B) Menus. On printed menus, calorie content values shall be legible and shall be printed in a size and typeface at least as large as the name or price of the menu item.

2. Range of calorie content values for different flavors and varieties. For menu items that come in different flavors and varieties but that are listed as a single menu item, including, but not limited to, beverages, ice cream, pizza or doughnuts, the range of calorie content values showing the minimum to maximum numbers of calories for all flavors or varieties of that item shall be listed on menu boards and menus for each size offered for sale.

(c) Effective date. This section shall take effect on July 1, 2007.

Notes: Section 81.50 was added by resolution adopted on December 5, 2006 to require that food service establishments in New York City that sell food items whose portion size and content are standardized prominently display publicly available information about

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\(^{187}\) N.Y. State Rest. Ass'n v. N.Y.C. Bd. of Health, No. 08 Civ. 1000(RJH), 2008 WL 1752455, at *12 (S.D.N.Y Apr. 16, 2008); see also L.R., supra note 180.
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the calorie content of such items on menu boards and menus in an effort to facilitate patrons’ nutritional choices at time of purchase.\textsuperscript{188}

New York was the first city in the country to enact a menu-labeling law.\textsuperscript{189} Since 2008, California, Maine, Seattle, Oregon, Maine, and Philadelphia have enacted similar laws, and the federal 2010 Affordable Care Act required calorie information to be displayed on both vending machines and menus of restaurants with more than twenty locations nationwide.\textsuperscript{190}

In response to the feedback received during the public comment period, the Health Department will allow alternative ways to display the information if pre-approved by the Health Department and to post the calorie range (instead of median) for products that come in a variety of flavors.\textsuperscript{191}

During the public comment period leading up to the final vote by the New York City Board of Health, 2267 comments were submitted; 2245 (ninety-nine percent) were in favor of the proposal and twenty-two were in opposition.\textsuperscript{192} But while the public has strongly supported the calorie informational labeling initiative, studies evaluating the positive health impacts have come to decidedly different conclusions as to whether such labeling actually helps limit calorie intake.\textsuperscript{193} That said, research indicates that restaurants are increasing their low calorie food options as a result of the new rule.\textsuperscript{194}

3. Composting

Will composting come to New York City? The city has seen mixed results with recycling. The city has approved the recycling of hard plastics

\begin{quote}
\textsuperscript{189} L.R., supra note 180.
\textsuperscript{190} Id.
\textsuperscript{191} Press Release, N.Y.C. Dep’t of Health and Mental Hygiene, Board of Health Votes to Require Calorie Labeling in Some New York City Restaurants (Dec. 5, 2006).
\textsuperscript{192} Id.
\textsuperscript{194} L.R., supra note 180; Bassett et al., supra note 193.
\end{quote}
and public space recycling, but recycling rates could be much better. Will Bloomberg’s “parting gift” of composting fare better?\footnote{195} New York City creates approximately fourteen million tons of solid waste annually but recycles only about half of it.\footnote{196} One quarter of the waste comes from homes, one quarter comes from businesses, and the remaining half comes from demolition and construction.\footnote{197} The Department of Sanitation handles 13,000 tons of waste per day, and private carting companies handle the remainder.\footnote{198} The city aims to divert at least seventy-five percent of its waste from landfills as part of the new plan.\footnote{199}

The city spends $2 billion annually to dispose of its waste, $300 million of which goes to the disposal of garbage in out-of-state landfills.\footnote{200} On average, it costs the city $95 per ton to ship garbage to landfills.\footnote{201} Tractor-trailer trucks travel approximately forty million miles to dispose of New York City’s garbage.\footnote{202}

Food waste is a significant contributor to the high amount of waste generated. Restaurants alone create half a million tons of waste per year.\footnote{203} In order to address this problem, Mayor Bloomberg issued a challenge in 2012 to reduce food waste by fifty percent and to institute a food waste tracking program.\footnote{204}

Following the lead of San Francisco, Seattle and dozens of smaller cities, New York City plans to require recycling of food waste generated in homes.\footnote{205} The program is part of a much larger effort to address New York City waste disposal problems by diverting thirty percent of waste away from landfills by 2017.\footnote{206} Food waste accounts for approximately


\footnote{197}{\textit{Id.}}


\footnote{199}{\textit{Waste and Recycling}, \textit{supra} note 196.}


\footnote{201}{\textit{Id.}}

\footnote{202}{\textit{Id.}}

\footnote{203}{\textit{Waste and Recycling}, \textit{supra} note 196.}

\footnote{204}{\textit{Id.}}

\footnote{205}{Navarro, \textit{supra} note 195.}

1.2 million tons of waste annually, or thirty-five percent of the city’s total waste, which is sent to landfills at $80 per ton.\(^{207}\)

The program would initially be voluntary but would eventually become mandatory, subjecting New York City citizens to fines similar to those incurred for failing to separate metal, paper, or plastic today.\(^{208}\) The first wave would include 150,000 single-family homes, 100 high-rise buildings, and 600 schools, with the entire city covered by 2016.\(^{209}\) The program would be spread across the five boroughs, with at least 25,000 homes in each.\(^{210}\) The city sanitation department would collect the food scraps from brown curbside bins, just as metal, glass, and paper are collected today.\(^{211}\) Citizens residing in apartments will dump their waste into common, centrally located collection points.\(^{212}\)

The city has conducted pilot programs, which it claims have shown “an unexpectedly high level of participation.”\(^{213}\) One pilot program, conducted on Staten Island, had a remarkable forty-three percent participation rate.\(^{214}\) As part of the pilot project, ninety schools in Brooklyn and Manhattan increased their diversion rates from fifteen percent to thirty-eight percent and thirty-five percent, respectively.\(^{215}\)

The city plans to hire a composting facility to handle approximately ten percent of New York City’s residential food waste, or 100,000 tons of food per year.\(^{216}\) The city is also set to take proposals from companies willing to build a facility in the New York area to produce biogas, or power generators,\(^{217}\) as well as fertilizer.\(^{218}\)

The biggest criticisms of the plan come from superintendents and landlords, who would be subject to the added burden of managing the new containers and keeping pests, which would be attracted to the added

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\(^{207}\) Id.

\(^{208}\) Navarro, supra note 195.

\(^{209}\) Id.

\(^{210}\) Erin Durkin, NYC Could Be on Top of the Heap as the City's Composting Program Expands, N.Y. DAILY NEWS (June 17, 2013, 12:28 AM), http://www.nydailynews.com/new-york/nyc-food-composting-program-expands-article-1.1374482.


\(^{212}\) Goldman, supra note 206.

\(^{213}\) Navarro, supra note 195.

\(^{214}\) Goldman, supra note 206; Durkin, supra note 210.

\(^{215}\) Goldman, supra note 206.

\(^{216}\) Navarro, supra note 195.


\(^{218}\) Goldman, supra note 206.
smell, away from their buildings.\textsuperscript{219} This issue could be exacerbated by the increasingly aged buildings in many parts of New York City.\textsuperscript{220} One author also expressed skepticism because “increasingly upscale” New Yorkers are unlikely to manage their rotting waste.\textsuperscript{221} Mayor Bloomberg also drew criticism after admitting that he has not cooked a single meal since the beginning of the program, and has, thus, not participated.\textsuperscript{222} In contrast, Mayor de Blasio strongly supports the program, including the intention to make it mandatory over time.\textsuperscript{223}

\textbf{III. Regulation and the New York City Experience}

In light of the New York experience, this Part evaluates theoretical notions of regulation—nudges and social norms—and how they might inform us as to the proper strategy for effectively passing and implementing effective regulatory approaches in our local environments. More specifically, do past normative conclusions hold?

From this, two overwhelming themes emerge for promoting everyday environmentalism, both relying on information as a driver for change. First, and most obviously, there must be a concerted and basic effort to raise awareness of the environmental costs of individual behavior in the aggregate and of the potential power of changes in individual behavior. Second, to generate change in individual behavior, policymakers should evaluate and apply specific decision-making tools to: (1) promote focused efforts to increase public awareness of the aggregate environmental costs of particular individual behavior, (2) determine the appropriate level of government or private action best suited to address that category of behavior, (3) create and promote use of broader information and labeling so individuals can evaluate the ecological costs of a service or product, (4) create economic incentives to influence individual behavior and take account of the value of ecosystem services, (5) use policies and approaches that target the key audience and products, and (6) support and facilitate effective community initiatives and personal efforts.\textsuperscript{224}

These conclusions still hold, especially in the power of local governments and local communities to help create sustainable communities and in the potential power and popularity of informational

regimes. But initiatives must be more sophisticated in how they provide information to consumers, especially in the context of eco-labeling. Governments should more readily consider positive economic incentives (that is, carrots) due to the political trouble inherent with economic penalties (that is, sticks). They must determine how to use community and shifting norms to enable political support for legislation that otherwise reduces personal autonomy. Finally, the development of infrastructure is underappreciated in policy and literature. Given the death of national environmental legislation and the reemerging norms agenda, traditional post-war infrastructure and investment must be reimagined for modern sustainable communities.

In terms of public opinion, “Mayor Michael R. Bloomberg’s crusades to restrict smoking, encourage biking, expose calorie counts and sideline automobiles are now overwhelmingly embraced by New York City residents, according to a New York Times poll, making his experiments in behavioral modification an unexpectedly popular hallmark of his legacy.” Yet as initiatives have increased costs for consumers and continue to limit personal choice and autonomy, the ease of the political passage and public support of such regulations decreases. What conclusions can we draw then from Bloomberg’s environmental legacy?

First, fundamental positive change can result from the building of infrastructure. This is often understated (including in this Author’s work). For example, seventy-three percent of New Yorkers approve of the Citi Bike bike-sharing program, and two-thirds wants better bike and pedestrian infrastructure. Seventy-two percent approve of the pedestrian plazas installed around the city during the Bloomberg administration, and sixty-four percent approve of the constructed bike lanes. “The transportation commissioner, Janette Sadik-Khan, added miles of bike lanes and turned over parts of Broadway near Times

225. Michael Barbaro & Megan Thee-Brenan, A Mayor, for Better or for Worse, N.Y. Times, Aug. 25, 2013, at MB2; see also Ginia Bellafante, A Mayor Who Puts Wall Street First, N.Y. Times, Aug. 18, 2013, at MB10 (“Among the various enduring images of the Bloomberg years, many are positive and some perhaps even blessed: bike lanes, smokeless restaurants, new expanses of green space, the increased presence of ferries on the city’s waterways.”); Jim Dwyer, The Impossible Mayor of the Possible, N.Y. Times, Aug. 18, 2013, at MB4 (“Not just the air changed. City parkland grew by about 800 acres; 750,000 new trees have been planted, toward a goal of one million, an initiative that took off after the parks commissioner, Adrian Benepe, reported that every dollar the city spent on a tree returned $5.50 in savings on heating, cooling and public health.”).


228. Miller, supra note 226.
Square to pedestrians.” Ironically, the key seems to be to push through infrastructure programs that face potential political problems at the initial development stage because the costs are more evenly distributed. In addition, the newly built infrastructure tends to prove quite popular due to the resulting increased quality of life and efficiency.

Second, both politicians and citizens disfavor perceived taxes, like congestion pricing, and bans, like those on sugary drinks. Thus, the congestion pricing initiative failed. Also, “[b]y a wide margin, people disapprove of [Mayor Bloomberg’s] attempt to reduce obesity by limiting sales of sugary drinks in containers larger than 16 ounces,” and fifty-nine percent of New Yorkers objected to the regulation.

But it seems knowledge—at least to the extent it reaches a critical mass—can alleviate many of the concerns related to bans. This explains why bans on smoking tobacco in public places and bans on sugary drinks are viewed differently. The dangers of tobacco are now well known, while severe concerns regarding obesity, sugar, and diet are still underappreciated. Journalist David Frum presented a series of statistics in support of the soda ban: “Sugary drinks now provide 7% of the calories in the American diet, the largest single national source of calories. Teen boys average more than a quart of sugary soda per day. . . . Just one soda a day doubles a woman’s risk of diabetes . . . [t]wo sodas raises her risk of heart disease by 40%.”

The irony in comparing congestion pricing to sugary drinks is that the public greatly favored congestion pricing, yet it was defeated in the political arena. On the other hand, Mayor Bloomberg and his Board of Health supported the sugary drink ban despite public opposition. Certainly, one reason for this irony is that congestion pricing required far more political support and process from the New York legislature and the New York City Council than was required for the sugary drink ban, which required support of the mayor and Board of Health. It seems, however, that the major takeaway is that, like infrastructure, major restrictions of liberty require massive upfront expenditures of political capital. This is key to understanding why the strategy is not used more often. And significant political capital often does not exist, perhaps illustrating, if anything, both the amazing success of the Bloomberg administration and of the Mayor himself in implementing his

229. Dwyer, supra note 225.
environmental agenda, and the massive failure in failing to master Albany’s capital politics in the context of congestion pricing.

Third, informational labeling is achievable and can gain popular support, but the results and effectiveness are mixed. New York’s calorie menu labeling initiative is certainly popular. In fact, “81 percent [of New Yorkers] approve of [the] requirement that fast-food chains post calorie counts on menus; 85 percent approve of [the] mandate that restaurants display the letter grades given to them by the city.”232 Yet, as stated in Part III, it is not clear that calorie labeling has been directly effective in reducing calorie consumption. That said, there may be substantial ancillary benefits. Illustrating the power of local rules, “[t]he New York City law prompted numerous other cities, counties, and states to pass similar laws . . . and eventually led the restaurant industry to drop resistance to the idea and instead seek a unified, national standard for menu labeling.”233 This may be powerful since, due to labeling, the evidence suggest that existing menus will likely be modified to include healthier, low-calorie items.

Hence, great care must be taken in creating and implementing any label, using both innovation and technical expertise.234 It is also thought “that government eco-labels are more effective than private ones, and simple and transparent seal of approval logos and labels have generally shaped consumer behavior more than the complex information-disclosure labels.”235 “In addition, eco-labels require a good quality

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234. Czarnezki, supra note 2, at 81–82.

An eco-label informational and certification scheme can provide engaged consumers with a measurable analysis created by experts and also provide a single point of product comparison for the less-engaged consumer. How would an eco-labeling scheme potentially work? First, a group of experts must pick food categories to target, identified by the scope of their adverse environmental impacts, where eco-labels would make a significant improvement to the environment. These categories might include meats and seafood, pesticide-intensive produce like berries, spinach and potatoes, and heavily processed foods. Second, objective scientific criteria to evaluate products must include a full life-cycle analysis. A life-cycle analysis would include consideration of natural resource and chemical use (starting at the production process or raw extraction stage), as well as emissions and pollution generated during the production, distribution and use, and disposal stages. The key is to inventory the materials that make up the food and allow for food production as well as the resulting environmental impact, something that is more difficult to determine. Third, products would be evaluated according to those scientific criteria and a seal awarded. Fourth, in light of technology and agricultural innovation, production selection criteria would be consistently reviewed.

Id.

235. Id. at 83 (citing Abhijit Banerjee & Barry D. Solomon, Eco-Labeling for Energy Efficiency and Sustainability: A Meta-Evaluation of US Programs, 31 ENERGY POL’Y 109 (2003)).
assurance scheme (which also would benefit from governmental ownership of the label) and a successful marketing program.\footnote{Id. (citing Helen Nilsson et al., The Use of Eco-Labeling Like Initiatives on Food Products to Promote Quality Assurance—Is There Enough Credibility?, 12 J. CLEANER PRODUCTION 517 (2004)).}

Fourth, regulations that rely solely on the “nudge” approach should be viewed with skepticism, at least to the extent that these regulations are done by government to restrict liberty without baseline community support, due to the political costs. A distinction can be drawn between Bloomberg’s sugary drink ban\footnote{Id. at 5 (“Libertarian paternalism is a relatively weak, soft, and noninstructive type of paternalism because choices are not blocked, fenced off, or significantly burdened.”).} and local initiatives that begin as community norms, which were then more widely implemented.\footnote{Richard H. Thaler & Cass R. Sunstein, Nudge 1–2, 5 (2008) (arguing that people can be greatly influenced by small changes in context, and advocating “libertarian paternalism” which preserves liberty of choice in an atmosphere where that choice is influenced to make the choosers better off).}

Even broader in scope, part of the failure of the nudge approach is that it both goes too far and does not go far enough, as we should favor more direct regulation on individual action and choice. Indeed, Cass Sunstein and Richard Thaler have persuasively argued that people can be greatly influenced by small changes in context and have advocated “libertarian paternalism,” which preserves liberty of choice in an atmosphere where that choice is influenced to make the choosers better off.\footnote{Katrín Bennhold, The Ministry of Nudges, N.Y. TIMES, Dec. 8, 2013, at BU1.} They write that “[i]n other words, we argue for self-conscious efforts, by institutions in the private sector and also by government, to steer people’s choices in directions that will improve their lives.”\footnote{Id. at 5 (“Libertarian paternalism is a relatively weak, soft, and noninstructive type of paternalism because choices are not blocked, fenced off, or significantly burdened.”).}

A concern is that the nudge approach will work to shrink government services and replace traditional public policy.\footnote{Id.} Another
concern is that, while there is clear merit in supporting such choice architecture, the Sunstein and Thaler version is too libertarian in its paternalism because it may inhibit the creation of significant government infrastructure, both of the brick-and-mortar type and in terms of social programs. Even Sunstein and Thaler suggest that sometimes it is necessary to go further down the paternalistic path; they mention the areas of health care and consumer protection. “Libertarian paternalism” does not work for the big things, reductions in freedom of choice might be necessary for major matters, and nudges don’t work at all for the building of infrastructure. It might often be necessary to go well beyond the nudge; maybe a push is necessary in some circumstances, as the Bloomberg administration often did.

**Conclusion**

Overall, this Article provides a new taxonomy to understand the different types of regulation. Using examples from New York City, we have learned that certain approaches are more appropriate than others. In general, we need more forceful nudges than we have seen to date in some areas and, where this kind of push is not yet possible, we need to lay the groundwork with some norm-shifting regulation that might be more palatable politically or to the public. Infrastructure shifts can also be a more successful type of intervention where more intrusive regulation fails. In this way, local governments are embracing the notion that government regulation can be more creative in pursuing alternative forms of regulation, can be a force for good, and can enhance market regulation. The more creative regulatory approaches seen in New York City and the power of norm-shifting thesis are both outgrowths of this general idea.

In a *New York Law Journal* Op-Ed piece Professor Michael Gerrard, more or less, accurately summarized Bloomberg’s environmental record: “To sum it all up, Bloomberg’s environmental achievements far exceeded his promises in most areas . . . . The biggest

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242. Choice architecture is defined as how the timing and context in which options are presented, matters. Thaler & Sunstein, *supra* note 239, at 83.
243. *Id.* at 251.
244. Lessig, *supra* note 7, at 666, 672 ("But unlike the old school, the new school does not see these alternatives as displacing law. Rather, the new school views them as each subject to law . . . . Law can select among these various techniques in selecting the end it wants to achieve. Which it selects depends on the return from each.").
disappointment has probably been the failure of the mayor’s congestion pricing plan.\textsuperscript{245} Indeed, the New York experience during the Bloomberg years provides us with some broader insights in addition to the more specific conclusions drawn in Part III.

Law is a workable tool to change individual behavior, and major government action can influence social norms. Thus, infrastructure and personal choice are subject to law.\textsuperscript{246} Policymakers should thus work to combine strategies; for example, they should rehabilitate traditional regulatory tools through initial nudging to allow for stronger political outcomes and offering a more temporal solution such as waiting to phase in initiatives following their passage. That said, cities should not fear reliance on strong traditional regulation—“pushes”—to get at individual actions, despite potential political challenges, as exemplified by congestion pricing’s failure.

New York City, due to its public cachet, can act as a norms leader,\textsuperscript{247} even if not actually the first mover, to initiate change in other urban centers and national politics, as seen in the popularity of smoking bans and the requirement for food menu labeling in the federal Affordable Care Act. And going further, through PlaNYC, New York should better foster neighborhood innovation and infrastructure development.

The future for New York City and its ability to continue to be on the cutting edge of sustainability (at least from a U.S. perspective) is unclear. However, in Mayor de Blasio’s campaign document, “A Framework for a Sustainable City,” he set “a goal of zero waste in New York”, by “strengthening and expanding existing recycling, instituting composting programs, and establishing waste reduction programs, including, for example, bans on plastic bags and requiring more materials to be recyclable or compostable.”\textsuperscript{248} While the Mayor de Blasio says he plans to continue and extend most of his predecessor’s policies,\textsuperscript{249} it remains to be seen if New York City will learn and adapt from the successes and failures of its past.

\textsuperscript{245} Michael B. Gerrard, \textit{Michael Bloomberg’s Environmental Record, Bill de Blasio’s Promises}, \textit{N.Y. L.J.} (Nov. 14, 2013).

\textsuperscript{246} Lessig, \textit{supra} note 7, at 666 (“But unlike the old school, the new school does not see these alternatives as displacing law. Rather, the new school views them as each \textit{subject} to law.”).


\textsuperscript{248} Gerrard, \textit{supra} note 245.

\textsuperscript{249} Id.