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The Regulation of Mobile Food Vending in New York City

abstract | Gourmet food trucks are now a common sight on the streets of many United States cities. These trucks represent a recent evolution of a much older tradition of street food vending in urban America. However, food truck entrepreneurs in many cities encounter vending laws designed decades earlier that frequently restrict the operation of their businesses. This paper examines the regulatory framework of mobile food vending in New York City, drawing upon an analysis of popular media articles, civil codes, and government documents. Research reveals a web of municipal and state agencies that regulate mobile food vending, whose requirements are arguably both draconian and overly burdensome. Additionally, analysis suggests several factors contribute to an informal regulatory framework, which reinforces the formal governmental regulation. Finally, in response to ambiguous terminology of mobile food vending, the paper presents a typology of mobile food vending in New York City, which may be useful to those interested in understanding the potential scope of contemporary mobile food vending operations.

keywords | Regulation, New York City, Mobile Food Vending, Food Trucks, Local Government

INTRODUCTION In addition to the wide variety of traditional restaurants in New York City, a quick glance at any number of social media applications will inform hungry people which of the city's new gourmet food trucks are nearby. The emergence of these so-called gourmet food trucks in the late 2000s and the early 2010s in NYC and other major cities seems to buck historical conceptions of street food. These mobile food vendors take a different approach from traditional street vendors by adopting such methods as flashy or artistic branding on their trucks; the use of novel, exotic, or non-traditional ingredients and preparation techniques; and the use of social media to connect directly with their customers. Due to these factors, these food trucks are often designated "gourmet" to separate them from other food trucks serving, by comparison, basic foods from unadorned and non-digitally connected trucks. By 2012, nationwide estimates indicated the food truck industry generated over \$1 billion in revenue.1

The National League of Cities' (NLoC) 2013 report Food on Wheels: Mobile Food Goes Mainstream suggested that cities across the United States may need to reexamine their regulatory codes to address the rise of this novel use of sidewalks, streets, and other street spaces by mobile food entrepreneurs.² Further, the NLoC report warned of potential conflict between mobile food vendors and more traditional brick and mortar restaurateurs over control of the streets. This research examines the regulatory framework affecting mobile food businesses

in New York City, of which gourmet food trucks are but a part. Additionally, the research examines the conflicts that have arisen between mobile food vendors and brick and mortar restaurateurs in NYC due to the growth of the gourmet food truck industry. Throughout this project, the researcher observed a lack of specificity concerning conceptions of mobile food vending from researchers, regulators, and popular media. The terms "food truck" or "food cart" appear most often, without any further attempt at specificity. The researcher created a typology to explain variation in characteristics of mobile food vending in NYC observed throughout this research. This typology of mobile food vending in NYC may be of use to both researchers examining food trucks as well as regulators seeking to understand the contemporary manifestations of mobile food vending. However, before proceeding, a brief examination of the history of mobile food vending nationally, as well as street vending in NYC, will help to contextualize this research.

A BRIEF HISTORY OF MOBILE FOOD VENDING

Urbanites have prepared and sold food in nearly every conceivable space within the urban environment since the advent of organized human settlement. Early recorded examples of urban mobile food vending in the United States begin in the 1870s when a man reportedly cut windows into a small wagon and set up shop near a newspaper's office with the hopes of selling food to the late night beat writers in Providence, Rhode Island. These so-called "lunch wagons"

boomed in the waning years of the nineteenth century through the end of World War II.3 The rise of the American automobile culture strongly affected the growth of suburbs and changed the streetscape. Suburbanization pushed lunch wagons off the streets and into buildings, often becoming diners and supermarkets.4 While suburbanization ushered in the death of the lunch wagon, it also saw the rise of the first food trucks. Workers toiling in suburban developments needed food, and the lack of nearby restaurants spurred entrepreneurs to builds kitchens into trucks that could easily follow construction workers around the metropolitan fringe.⁵ Much of the municipal code that now affects mobile food vending was written in the years after World War II.6 Unsurprisingly, contemporary communities have struggled with enforcing these oftentimes archaic regulations in the current environment.

After the postwar suburbanization boom, another form of early food truck evolved in Los Angeles in the 1980s, known as the "taco truck." In small kitchens mounted inside trucks, Latino immigrants traveled their ethnic enclaves to serve tacos and other ethnic dishes. Anthropologist Fazila Bhimiji considered this Latino immigrant entrepreneurialism a response to economic hardships. Several authors have noted a strong relationship between mobile food entrepreneurialism and economic hardship in differing parts of the country both historically and today.

Sociologist Marina Calloni's commentary on street food suggests that street food historically carried the stigma of the working classes, one that the more affluent classes avoided through their ability to eat both indoors and at a table. Conversely, the working classes needed cheap, easy to consume food that allowed them to quickly return to their places of employment. Calloni offered the British fish and chips as an early example of such food and points to a mention of that British dish as fit for a poor man in Dickens's 1859 A Tale of Two Cities. She further states that the traditional assumption was that food purchased on the street was not healthy while food consumed within the house was. Actual nutritional content aside, Calloni's analysis helped contextualize the pejorative names often attached to mobile food vendors.

Mobile food vending has acquired numerous names, both descriptive and generic, over its history. Generic names include "food truck," "hot dog stand," and "falafel cart." "Lonchera" and "taco truck" are vernacular for trucks serving Latino foods in greater Los Angeles. ¹⁰ Rutgers University's "grease trucks" have murky origins but likely entered campus culture during the 1980s. ¹¹ The United Services Organization (USO) has used "mobile canteens"

to serve food at military construction sites, deployments, homecomings, and other events since at least the 1920s. 12 Other commonly used names include "roach truck" or "roach coach." 13 Other names likely exist. This lack of standardized naming suggests a significant regional diversity in mobile food nomenclature, but the generally negative connotation of most names conforms to historical notions that street food is cheap or unhealthy.

So-called gourmet food trucks emerged in cities around the United States beginning in the mid-2000s. Often truck owners would gather in large rallies, a twist on the traditional street fair, in which trucks form inward-facing spatial formations thereby changing the nature of included space. Some communities compete to see who can host the rally with the largest number of participant trucks. In the summer of 2013, Miami reported a rally of sixty-two trucks, only to be surpassed by Tampa's ninety-nine truck rally. 14 Interestingly, even a casual reading of popular media articles about the growth of gourmet food trucks seems to suggest a reversal of the "street food is unhealthy" stereotype Calloni suggests. Rather, the popular media casts gourmet food trucks as, at least, not unhealthy and positions the trucks as destinations for members of all economic strata.

A BRIEF HISTORY OF MOBILE FOOD VENDING IN

NEW YORK CITY Street vending has a long history in New York City. However, reports are uncertain as to its origin, with some scholars suggesting that street vendors emerged in the late seventeenth century. 15 Local laws prevented these so-called "hucksters" from operation until established vendors had already been open for several hours. City leaders banned street vending in 1707, but it continued illegally despite the ban. Both groups of scholars noted a strong connection between street vending and the city's immigrant population. Throughout the nineteenth century, working and lower classes were considered the proper patrons for street vendors, while higher classes patronized established indoor restaurants. This seems to support Calloni's research on street food. 16 D.S. Taylor et al., a group of nutritionists, noted that established businesses and police commonly extorted money from mobile vendors in exchange for tolerance of their presence.¹⁷ During the Progressive era, street vendors elected to ignore laws that restricted operating from specific locations. In response, the city created designated street markets in low profile areas of the city, such as underneath the approaches to many of the city's major bridges. Pushcarts, often owned by second wave immigrants from southern and Eastern Europe along

with the Irish, were common during this period. During the lead up to the World's Fair of 1939, the LaGuardia administration shut down many of these designated areas, but several have survived into the contemporary period. 18

Opposition to street vending grew in the minds of New York City's administrators in the years following World War II. The Koch administration restricted the number of street vendors in areas of Midtown and lower Manhattan along with certain areas of Queens and Brooklyn. Additionally, Mayor Koch instituted a limit on the number of permits issued for general vending and food vending.¹⁹ The Dinkins administration desired to regulate informal street vending but struggled to create legal frameworks to interact with undocumented immigrants who commonly relied upon street vending to generate income. Mayor Dinkins created the New York Police Department (NYPD) Peddling Task Force to enforce street vending laws across the city.20 The Giuliani administration actively attempted to corral street vending. It created the Street Vendor Review Panel that voted on requests to restrict or prevent street vendors from operating on certain streets. Critics of the panel considered it a rubber stamp for established business interests.²¹ The Big Apple Food Vendors Association, a now defunct trade organization, eventually challenged the panel's rules in court on grounds that the panel did not apply an objective standard to its restrictions. The ensuing court battle ended in the late 1990s with a compromise: mobile food vendors could operate on city streets, but both the streets that could be utilized for vending and the time frame in which they could be used were heavily restricted. Most of these restricted or banned streets were located in Manhattan.²²

The Bloomberg administration, recognizing a dearth of vending options for healthy fruits and vegetables in New York, created the Green Cart program in 2008. The Green Cart program allowed for the mobile food vending that exclusively sold fresh fruits and vegetables. The administration modified regulations to allow for Green Carts in addition to existing limits on mobile food vending licenses. These additional permits allow the Green Carts to operate within specific boroughs, with the total number of permits limited for each borough. Further, the Bloomberg administration collaborated with the Laurie M. Tisch Illumination Fund to facilitate microfinancing for individuals interested in developing Green Cart businesses. The program quickly gained popularity after its introduction.²³

Street vendors in contemporary New York sell all manner of goods. Examples of current selections range from fresh and prepared foods to art, music, clothing, accessories, toys, and memorabilia. This quick overview of street

vending history in New York City shows three important points. First, street vending, in whatever form, has been a part of New York City for many generations. Second, those street vendors have continually conflicted with established businesses. Third and finally, despite various attempts to legislate away their existence, consumer demand continues to prove a powerful draw, and entrepreneurs continue to respond creatively to that consumer desire.

LITERATURE REVIEW Limited academic research exists on New York City's regulatory framework of the mobile food industry. In 2010, New York City's Independent Budget Office (IBO) reported on street vendor regulation.²⁴ The report states a number of city departments are responsible for regulating mobile food vending, including "consumer affairs, health, business services, transportation, finance, city planning, and the police." Interestingly, the report suggested its researchers had difficulties both locating information and effectively reporting their findings. For example, the report writers attempted to quantify both the cost burden and the revenue from street vending but were unable to effectively measure the total cost paid by the City of New York for enforcement of street vending regulations. However, the report estimated the City of New York spent \$7.4 million for fiscal year 2009 on street vending regulations. Further, the report identified roughly \$9 million in fines and fees imposed on vendors during the same year but only \$1.4 million collected in revenue.

Public adminstration scholar Ryan Thomas Devlin, in his analysis of mobile vending in Midtown Manhattan, stated that street vending in New York is influenced by a combination of "intimidation, harassment, avoidance, and evasion employed by various actors including enforcement agents, store and building managers, and vendors themselves." His analysis specifically focused on the role of business improvement districts (BIDs), alliances of non-mobile businesses, and building owners bound within specific regions of Midtown Manhattan, who conspire to push mobile vendors away from their territories.

In 2007, Ya-Tang Liu, a Masters of City Planning student at MIT, examined street vendor entrepreneurialism in New York City. Her analysis suggested that New York City's regulatory system is highly complex with numerous participating city agencies. Liu estimated that while the number of licensed vendors—almost 4,000 permits for both general and food vending—have not increased since the Koch administration, the number of total vendors in the city was roughly three times this number. These unlicensed vendors operate illegally. Liu further suggested that even if

one can obtain a permit, the draconian nature of the various codes and restrictions makes it extremely difficult to operate a street vending business completely legally. Finally, Liu concurred with Devlin's suggestion that established businesses, alliances of businesses, and BIDs exert a significant amount of control over what occurs on adjacent streets. To Liu, these power elites viewed mobile vendors as problems and not as entrepreneurial assets that might grow into larger businesses in the future.

A group of first-year architecture and city planning graduate students from Columbia University explored contemporary street vending in New York City in 2011. They suggested a typology of street vending that includes the following: food vendors; general merchandise vendors; First Amendment vendors; veteran vendors; and unlicensed vendors.27 Rembert Browne et al. noted the entrepreneurial nature of street vending and suggested a positive relationship between immigrant status and street vendor entrepreneurialism. Their report estimated that roughly 13,000 people currently work in vending jobs across their suggested typology. Specifically addressing food vendors, Browne et al. estimated that there were 3,000 food vendor workers in New York City in 2011. Further, they confirmed that the city issues only a fixed number of permits for the operation of food "truck/ table/cart" businesses. Demand for these permits far exceeded the number issued. They estimated that the black market lease of permits for two years could cost as much as \$15,000 to \$20,000. Accordingly, the scarcity of permits and high revenues generated by their black market lease ensured permit ownership does not change often. Finally, Browne et al. suggested a three-part typology of physical units used to vend food on the streets: tables/ non-processing carts, processing carts, and trucks. They estimated the following cost for each type: tables/nonprocessing carts cost \$3,000; processing carts cost between \$15,000 and \$30,000; and trucks can cost upwards of \$80,000.

Finally, June M. Tester et al., a team of public health professionals and doctors, explored the role of mobile food vending in the obesity epidemic in New York's regulatory framework. ²⁸ The authors found that New York's system encouraged the presence of healthy food in mobile vending. However, their analysis of the regulatory system is highly focused on New York's Green Carts, which exclusively serve fresh, uncut fruits and vegetables.

METHOD This analysis employed the following research questions: What regulatory regimes exist for mobile food vending in New York City? How is mobile food vending contested?

The researcher primarily engaged in archival research in this study. John Zeisel's notes on environmentbehavior data collection guided this work's archival and observational research.²⁹ The bulk of data collection for this research occurred between the fall of 2013 and the summer of 2014. The primary sources of data for archival analysis included The New York Times archive and the social media pages and conventional websites of food truck and food truck proponent organizations. Searches of articles about food trucks or mobile food vending spanned four years, April 2010 through April 2014. Searches prior to April 2010 revealed little relevant information and were thus excluded. Search terms included but were not limited to the following words or phrases: "food truck," "gourmet food truck," "food truck rally," "street food," "brick and mortar," "mobile food," "food cart," "regulation," "street," "commissary," "permit," and "license." Search terms also included the names of the government agencies discussed in the findings sections. Examination of any text found through this research was purposive.

Additionally, the researcher cross-referenced findings from news articles with the websites of government agencies responsible for the regulation of mobile food vending in NYC and the State of New York. These websites provided white papers that listed relevant codes as well as agency rules, application processes, and timelines. Examination of these white papers was purposive. The researcher also attended one expert presentation by Jim Middleton, the Executive Director of the Bureau of Food Safety and Community Sanitation of the New York City Department of Health and Mental Hygiene (DOHMH). During this presentation, the researcher asked a number of unstructured questions to clarify aspects of the presentation. Finally, the researcher also assisted built environment scholars Karen A. Franck and Philip Speranza in their survey of NYC food truck owners during the summer of 2014.30 Discussions with owners as well as visual observations about the built characteristics of the food trucks informed this work's findings.

FINDINGS Findings are divided by research question. The first section outlines findings relevant to the regulation of mobile food vending while the second outlines the conflict between mobile food vendors and other actors on the street.

Regulatory Regimes of Mobile Food Vending Research revealed the existence of two types of regulation, one formally tied to governmental powers and jurisdiction and the other informally tied to the interactions between mobile food vendors and other private sector actors.

Formal Regulations In New York City, regulation of mobile food vending, and street vending in general, is a complex apparatus that involves a number of city and state agencies. There is no one code or statute that governs mobile food vendors but rather a network of codes, statutes, and enforcement methods. The researcher identified four regulated objects or groups: a) vending units, b) vending unit operators, c) food served, and d) urban space utilized. One or more administrative agencies regulate each of these objects or groups. Administrative agencies span both the City of New York and the State of New York. Agencies responsible for the formal regulation of mobile food vendors include the State of New York's Department of Transportation and the Workers Compensation Bureau along with the following agencies in the City of New York: Department of Health and Mental Hygiene (DOHMH), Police Department (NYPD), Fire Department (NYFD), Parks Department, and the Department of Sanitation.

Regulation of Vending Units All food vending units required a permit from DOHMH to operate legally. DOHMH restricted the total number of permits issued for mobile food units. Permits were limited both by individual borough and the city as a whole, resulting in a limit of 2,800 citywide permits, 200 borough-specific permits, 100 citywide permits for disabled veterans, 1,000 seasonal permits, and 1,000 Green Cart permits. ³¹ Either individuals or legal entities, such as limited liability corporations, could hold permits. City code required permits stickers be placed on vending units owned by permit holders, but historically this was not enforced. This lack of enforcement likely led to a strong black market where permit holders illegally lease their permits to wanting entrepreneurs.³²

DOHMH inspected units during permit application, transfer, or after two years of permitted status. Inspectors placed permit stickers on units upon successful inspection. Figure 1 is an example of a permit sticker. DOHMH code required that units be equipped with the tools and accessories necessary to ensure proper storage, preparation, and disposal of food and food byproducts. The type of food sold from the unit dictated the required equipment. A significant categorization of equipment requirements distinguished units where food is cooked or prepared internally, called processing units, from units that do not process food in this way, called non-processing units.

Further division within non-processing units depended on whether the food sold either a) required temperature control and/or b) was prepackaged.

Potential types of required equipment included potable water, washing sinks for food and cooking tools, hand washing sink, waste water tank, overhead structure, ventilation, cold holding, hot holding, and thermometers. Special exceptions to these requirements existed. Units selling frozen desserts required a separate permit from DOHMH, and units had a separate set of equipment requirements to prevent spoilage. Additionally, Green Carts—units selling only uncut and uncooked fruits and vegetables—enjoyed lower equipment restrictions due to the high turnover in fresh foods.³³ DOHMH provided two charts that aid in understanding which equipment is required on vending units. See Appendix 1 for these charts.³⁴



FIGURE 1. New York City DOHMH Mobile Food Unit Permit. *Source*: Author photo (2014)

DOHMH also regulated the spatial dimensions of vending units. Self-powered units, commonly called trucks, had a separate set of requirements than non-self-powered units, or carts. Self-powered trucks fell under the State of New York's Traffic and Vehicle laws for street worthiness. State law required trucks not to be wider than ninety-six inches or taller than thirteen and a half feet. Truck length depended upon the maximum number of passengers the vehicle could seat. Units not converted from buses could be a maximum of forty feet long, while buses seating over seven passengers were able to be forty-five feet long. Trucks were also restricted by weight. Total truck weight was not able to exceed 800 pounds per inch of tire width on one wheel. Additionally, trucks weighing more than 71,000 pounds had to confirm to federal bridge standards.³⁵

Conversely, carts enjoyed significantly fewer restrictions. DOHMH required that a cart's total perimeter could not exceed five feet by ten feet, including any awning.³⁶ Both cart and truck walls, base, floor, and food contact surfaces were required to have been constructed of the following materials: stainless steel, aluminum, or other approved non-corrosive and non-rusting materials. Plastics had to be Plexiglas or Lexan and could only be used for display purposes. All cooking services could have no structural defects and were required to be enclosed on three sides with a top for protection against airborne contamination.³⁷

Finally, all mobile food units had to dock overnight in a DOHMH licensed commissary. Commissaries provided a centralized location where operators could clean units, sanitize their equipment, and dispose of solid waste and wastewater. All waste generated by mobile food vending was required to be disposed at licensed commissary locations.³⁸ Some commissaries had in-house kitchens and allowed vendors to prepare food.³⁹ Owners of Green Carts and units selling only pre-packaged foods could request DOHMH to allow storage in another facility.⁴⁰ Both Jim Middleton's presentation and a New York Times article suggested that commissaries play a central role in the black market trade of licenses and permits. Details were not specific, but commissaries likely provide a communal space where mobile food business owners, suppliers, and license holders could congregate.⁴¹ Figure 2 shows a map of all officially licensed commissary locations as of 2011.

Regulation of Vending Unit Operators DOHMH required licenses for all employees of mobile food businesses. This licensure required a number of prerequisite documents: license application, proof of address, social security number or state tax identification number, photographic identification, New York State Sales Tax Certification of Authority, New York City Environmental Control Board clearance, Child Support Enforcement form, and Food Protection Course for Mobile Food Vendors Certificate.43 DOHMH placed no limit on the number of vendor licenses issued, required applicant vendors to submit their applications in person, and required that applications be made at least one full week after the successful completion of the DOHMH food safety course. Applicants could not begin work on a mobile food unit until they had received their license and the photographic identification that accompanies it. Receipt generally took three weeks.44 Interestingly, assuming a new hire for a mobile food vendor had all of preceding paperwork in order, that worker had to wait roughly one full month before they received the necessary license to begin work. Finally, in the beginning

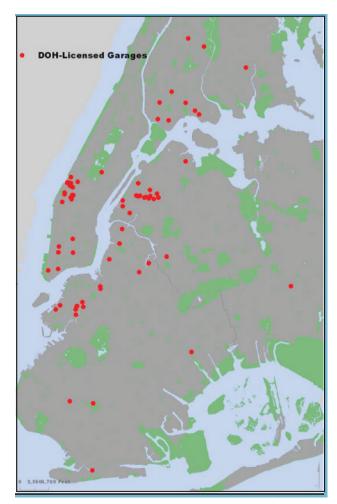


FIGURE 2. Location of Commissaries Licensed by DOHMH. 42 Source: Brown et al (2011)

of 2014, DOHMH began enforcing a requirement from the State of New York that required all mobile food vendor businesses to carry Workers' Compensation insurance for all employees and volunteers. Proof of insurance was required during any application or renewal of a permit or license.45

Regulations of Food DOHMH was the primary city agency responsible for ensuring that all NYC food businesses prepared food safely.⁴⁶ As part of the food vendor licensure, DOHMH required all employees and volunteers who prepared food to complete one food safety course. This requirement extended to employees and volunteers of both traditional brick and mortar restaurants and mobile food businesses. As separate classes existed for vendors of each type, it appeared DOHMH made an effort to customize their content for each audience. Satisfactory completion of this course was required for issuance of a vendor license. DOHMH or NYPD could issue citations to food workers who worked without a license.⁴⁷ Separately, DOHMH required mobile food vendors to submit a list

of every wholesaler from whom the mobile food vendor planned to purchase ingredients. DOHMH administrative code required business owners to submit this list during the permitting process. The researcher was unable to discover if brick and mortar restaurants were also subject to this requirement.⁴⁸

Regulations of Use of Space Municipal code highly restricted where mobile vendors could conduct business. As with other aspects of mobile food vending regulation, some restrictions overlapped or were unclear. New York City's Administrative Code restricted street vendors from operating on specific city streets as well as on certain streets during certain times of the day. These restrictions sometimes differed depending on the type of vending. Banned and restricted streets are too numerous to list here, but a brief example of each type of restriction is provided. In the borough of Manhattan, code banned food vendors from operating on the following streets at any time:

East by the easterly side of Broadway; on the south by the southerly side of Liberty Street; on the west by the westerly side of West Street; and on the north by the northerly side of Vesey Street. Food vendors are restricted from operating on the following streets during the following days and times: Third Avenue—East 40th to East 57th Street, Monday through Friday, 8 a.m. to 6 p.m.; East 58th to East 60th Street, Monday through Saturday, 8 a.m. to 9 p.m.; Lexington Avenue—East 40th to East 57th Street, Monday through Saturday, 8 a.m. to 7 p.m.; East 58th to East 60th Street, Monday through Saturday, 8 a.m. to 9 p.m.; East 61st to East 69th Street, Monday through Saturday, 8 a.m. to 6 p.m.⁴⁹

When the units were legally allowed to operate on a street, code also restricted units from touching, leaning against or being permanently or temporarily affixed to the following: lamp posts, parking meters, mailboxes, traffic signal stanchions, fire hydrants, tree boxes, benches, bus shelters, refuse baskets, or traffic barriers. Further, vendors could not operate within ten feet of the following: any driveway, any subway entrance or exit or any crosswalks at any intersection or any driveway, any subway entrance or exit, or any crosswalk at any intersection. Additionally, vendors could not operate with twenty feet of any of the following: buildings, stores, theatres, movie houses, sports arenas, or other places of public assembly. Finally, civil code also prevented vendors from operating within 200 feet of any school or 500 feet from any public market. Browne et al. provided an excellent visualization of these complex restrictions; see Figure 3.50

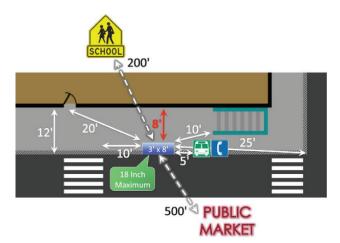


FIGURE 3. A Visualization Street Vending Proximity Restrictions based on New York City Administrative Code. *Source*: New York City Business Solutions (2014)

Analysis of news articles indicated that in 2011 NYPD began aggressively ticketing food trucks selling from metered parking spaces in Midtown Manhattan. NYPD's actions were likely in response to a ruling from the Manhattan Supreme Court who confirmed that a 1954 law designed to restrict street vendors from selling their wares from metered parking spaces also applied to food trucks.⁵¹ Shortly after this, the New York Parks Department began to reach out to mobile vendors about permitting their presence at events in city parks. The Parks Department still required a formal permitting process which was similar to DOHMH's permit process.⁵² Mobile vendors could also vend on private property with written permission from the property owner. However, DOHMH required that mobile vendors still apply for a "restricted area" permit to operate on private property. Research indicated minimal wait times for this permit.53

Informal Regulations In addition to formal regulations, the researcher also uncovered informal, private sector forces that indirectly regulated mobile food vendors. The following factors informally regulated mobile food vendors: an informal code between vendors, harassment by other business owners, and physical interventions on the street and sidewalk.

The author of one popular media article noted that informal codes of conduct existed within the mobile food vendor community that suggested a first come, first served attitude when determining who was able to park in a specific location.⁵⁴ However, two other authors suggested food trucks owners have become increasingly aggressive in ensuring they have access to prime parking spots.⁵⁵ Another journalist described an altercation between two food truck operators that required police intervention.⁵⁶ In another

article, Zach Brooks, New York Times contributor and owner of the website Midtown Lunch, suggested the existence of long held, unspoken understandings between traditional mobile food vendors, the city government, and brick and mortar restaurants. The understanding was that traditional mobile food vendors operated quietly and did not interfere with the profits or operations of established businesses. As long as brick and mortar restaurants and police did not need to interact with mobile food vendors, they would ignore the mobile vendors' presence. However, Brooks stated that the emergence of gourmet food trucks has changed this understanding. Indoor businesses tolerated the first few gourmet food trucks, but once trucks began to compete with each other and crowd the streets, brick and mortar restaurants took notice and started pushing back. Brooks concluded that the current tension over mobile food vending represents a breakdown in this system due to food truck entrepreneurs' flagrant disregard for this unwritten code between vendors, businesses, and the police.⁵⁷

Other authors suggested a highly adversarial relationship between brick and mortar restaurants owners and mobile food vendors.⁵⁸ Frequently, brick and mortar restaurant owners contended that mobile food vendors draw business away from their venues. This narrative aligns well with historical research over control of public space in NYC. No media articles offer any credible evidence to confirm this charge, and the researcher was unable to locate any academic work that addresses this issue. Several articles suggested that brick and mortar restaurateurs may exert pressure on NYPD, DOHMH, and other municipal agencies to strictly enforce formal regulations.⁵⁹ Other research suggested that this phenomenon is by no means restricted to New York restaurateurs.60

Devlin confirmed the tendency among non-mobile business owners to compel mobile vendors not to vend







FIGURE 5. Food Cart Next to Planter on 34th Street near Penn Station. Source: Jones (2014)

near their buildings.⁶¹ However, unlike verbal harassment and exerting pressure on police, some non-mobile business owners will install physical interventions onto the streetscape to discourage mobile vendors. These physical interventions are a subtler way of controlling the streets occupied by their businesses. Devlin also noted that business improvement districts (BIDs) engage in this practice on behalf of their member businesses. A very common example of such an intervention is a large planter. Figures 4 and 5 provide examples of these interventions. These pictures show planters installed by Manhattan's 34th Street Partnership. Devlin indicated these planters would discourage mobile vendors, regardless of their product, from operating effectively in this space. Interestingly, the planter does not seem to impede the food cart in Figure 5. However, New York City's Administrative Code restricted vending within ten feet of a permanent street fixture. The permanent nature of this planter is debatable, but NYPD, facing pressure from nearby non-mobile business owners, could write a citation using proximity to the planter as pretense.

Interest Group Conflict The researcher also uncovered a number of parties in conflict over the rise of gourmet food trucks. These groups include mobile food entrepreneurs, brick and mortar restaurants, other businesses and business improvement districts (BIDs), government agencies, and consumers. Each group influenced the continually evolving regulatory framework of mobile food vending and street vending as a whole.

Mobile Food Entrepreneurs Portrayals of mobile food entrepreneurs in the media articles examined indicated an interest growing their small businesses. They likely favored lax enforcement of the existing regulatory regime that restricts their ability to conduct business on the street. They would likely support any reforms to regulations that either a) reduce or streamline their interaction with regulatory bodies or b) improve their ability to conduct business. Mobile vendors were likely upset with the regulatory agencies whose influence they view as cumbersome and restrictive to their businesses. In response to this conflict, some food truck owners formed the Food Truck Association (HTTP://www.nycfoodtrucks.org/) in 2012 to advocate on behalf of individual food truck businesses. The Urban Justice Center's Street Vendor Project (HTTP://STREETVENDOR. ORG/) formed on behalf of all mobile vendors, food and nonfood, within New York City.

Brick and Mortar Restaurants In media articles, brick and mortar restaurateurs appeared broadly unified in their opposition to the recent growth in mobile food vending. Specifically, they were concerned about the growing number of gourmet food trucks that brick and mortar restaurateurs believed to be their direct competition. Brick and mortar restaurants appeared to support strong enforcement of existing laws that restrict mobile food vending and were likely to support any regulatory reform that increased the difficulty in operating a mobile food business. Additionally, journalists indicated that opposition to mobile food vending is not a trait specific to New York City brick and mortar restaurateurs; cited cities included Boston, Chicago, Seattle, Dayton, and St. Louis. 62

Common criticisms held by brick and mortar restaurateurs appeared to be threefold. First, brick and mortar restaurateurs perceived a disparity in both start-up and overhead costs for food trucks versus their restaurants. Start-up costs differed dramatically, with one estimate projecting brick and mortar start-up costs at over a million dollars, with food trucks at around \$80,000-\$100,000.63 A Forbes magazine article suggested the following start-up costs: a street kiosk (Forbes' term for a food cart) at \$4,500, a food truck at \$70,000 to \$80,000, and a brick and mortar restaurant at \$100,000 to \$300,000.64 Alex Mayyasi, writing for the blog Priceconomics suggested startup costs for a food truck to be in the \$50,000-\$150,000 range where a traditional brick and mortar may range from \$280,000-\$500,000.65 Monthly operating costs also differed drastically, with buildings rents costing traditional owners thousands of dollars per month. 66 Mayyasi noted that food trucks owners do not pay rent per se, but interest

payments on units could be considered a stand-in for rent. Additionally, food truck owners must pay for truck repairs, storage at commissaries, commercial kitchen space, gasoline, parking fees, road tolls, insurance, and likely many other small surcharges. Finally, the potential cost of illegally leasing a vending unit permit must also be considered, which estimates project between \$15,000-\$20,000 annually.⁶⁷ Once the mobile unit was ready for operation, an annual cost estimate to operate a food truck in NYC was roughly \$80,000.⁶⁸

Second, journalists indicated that brick and mortar restaurateurs tend to believe regulatory enforcement between themselves and mobile vendors to be unequal. Brick and mortar restaurateurs believed that DOHMH health inspections posed a greater burden to their stores because DOHMH code required brick and mortar stores to display the letter grade from their inspection. Conversely, mobile food vendors were simply required to present their permit, which indicates passage of inspection.⁶⁹

Third and finally, many brick and mortar restaurateurs suggested that food trucks steal their customers when the trucks park nearby. Despite these claims, the researcher was unable to find any empirical analysis that supported this supposition. A study by urban planner John Gaber examined informal street vending on Manhattan's 14th Street in the mid-1990s and focused on street vending generally. Gaber concluded that diversity in retail options, both formal and informal, at the street level in fact benefited traditional brick and mortar merchants of all types. Empirical investigation of the contention that food trucks siphon customers from brick and mortar restaurateurs would be excellent future research.

Other Businesses and Business-Improved Districts

Journalists further indicated that non-food businesses also have a stake in restricting the growth of mobile food vending, but not to the degree of brick and mortar restaurateurs. Similar to traditional restaurateurs, other business owners complained about the location of mobile food vendors near their businesses, which they contended disrupted pedestrian traffic and were distracting to their business. 72 As noted above, BIDs may use physical interventions or exert pressure on local regulatory agencies to push mobile food vendors away from their adjacent street space. These businesses likely had a limited stake in the conflict between mobile and non-mobile restaurants, but these businesses would intervene if the conflict interfered with their business functions.

Government Agencies Research indicated that a diverse set of government agencies played a role in regulating the mobile food industry. These government agencies balanced competing business interests while ensuring protection of the public good and the day-to-day operation of city streets. They likely sought to avoid increases in traffic, congestion, pollution, and potential food borne illnesses that food trucks may encourage. However, given the large number of regulations and potentially block-by-block differences in regulation, high barriers existed for proper enforcement by NYPD and other city agencies. Research indicated that police were the primary agency responsible for enforcement of street vendor regulations; however, only one region of the city, south of 59th Street in Manhattan, had a police unit specifically assigned to enforce all types of street vending regulations. Enforcement throughout the rest of the city was part of routine patrol for the NYPD.73 DOMHM also dispatched inspectors for mobile vendor inspections; however, the researcher was unable to discover the exact number of DOHMH inspectors.74

At the time of this research, New York City's mayor Bill de Blasio had yet to tackle the food truck issue. During the mayoral campaign, candidate de Blasio weighed in briefly on the side of brick and mortar restaurateurs. Candidate de Blasio stated his belief that the "weight of regulation" falls more heavily on "traditional businesses." He specifically pointed to the fact that mobile food vendors are not required to place the letter grade generated by their inspection by DOHMH while brick and mortar restaurants are required to display this grade.

Consumers Finally, consumers played a vital role in the growth of mobile food vending. The rise of gourmet food trucks within the last decade speaks to the power of urban consumers when armed with social media platforms. Any discussion of the evolution in regulatory policy surrounding food trucks, or mobile food vending more generally, must account for the role of the consumer. In several articles, journalists informally discussed customers' dismay when a court ruling in 2011 allowed NYPD to displace food trucks away from many areas of Midtown Manhattan. One article specifically quoted a customer's belief that food trucks were "part of [his] lunch tradition," implying that, at least for Midtown, customers accepted food trucks as part of the larger cityscape.⁷⁷

DISCUSSION This work confirmed the existence of a well-developed formal regulatory regime with oversight of mobile food vending in New York City. Further, analysis revealed an informal regime of brick and mortar

restaurants, other businesses, BIDs, and the mobile vendors themselves, all which influence mobile food vending in New York City. Additionally, analysis found evidence of a conflict between food trucks entrepreneurs, brick and mortar restaurateurs, and other street-level businesses for control of the city street. Brick and mortar restaurateurs complained that they were losing customers to food trucks. This belief aligned with historical reactions to cyclical growths in street vending. New York City's Independent Budget Office (IBO) investigated a claim made by some brick and mortar restaurateurs that mobile food vendors either underpaid or did not pay sales tax, which constitutes an unfair advantage.⁷⁸ The IBO was unable to locate evidence that either supported or refuted this claim due to constraints within New York State sales tax data collection. Other businesses likely considered food trucks disruptive to the spatial environments near their businesses. In response to the growth of gourmet food trucks in the early 2010s, both groups of businesses likely pressured municipal regulatory agencies to more strictly enforce existing regulations in the hopes of forcing food trucks away from their places of business and hopefully their customer base.

Throughout this project, the researcher observed a lack of specificity concerning conceptions of mobile food vending from examined data. Commonly, a vast range of differing phenomenon fell under vernacular names as "food truck" or "food cart." As noted above, the advent of so-called gourmet food trucks represents a paradigm shift in mobile food vending that is dissimilar from historical examples of mobile food vending. To bring a greater level of specificity to future research or public policy development related to mobile food vending, the researcher created a typology to explain the variation in characteristics of mobile food vending. Due to this research's focus on NYC, this typology is specific to that city. However, the typology is likely generalizable to mobile food vending in other major cities across the nation.

Research suggested that the presence of one characteristic of a mobile food vending unit was linked to other related characteristics, but this is not always the case. Therefore, the researcher constructed a flowchart that maps the characteristics of mobile food vending units by category. The flowchart, Figure 6, contains the following seven categories: 1) type of food sold, 2) equipment requirements to support type of food sold, 3) the unit's power source, 4) whether unit operators work inside or outside of the unit, 5) whether the unit operates on the sidewalk or the street, 6) whether the unit tends to operate away or near other units of similar type, and 7) whether the

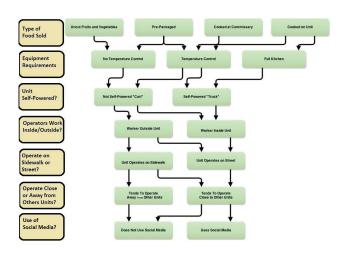


FIGURE 6. Flowchart of Mobile Food Typology

unit uses social media to engage its customer base. Type of food(s) seemed a logical starting point for the flowchart, but others might select a different starting category. The first two categories are multidimensional while the remainder is binary. The final two categories are binary but likely exist in a continuum.

CONCLUSION This research examined the regulatory regime that managed mobile food vending in New York City in the early 2010s with a specific focus on the emerging food truck phenomenon. The work documented a highly regulated system affected by a number of different municipal and state agencies. Further, the research also documented that a number of interest groups within New York City are in conflict over the future growth of the gourmet food truck phenomenon. In response to ambiguity observed throughout this research regarding the differences under the broad vernacular words of "food truck" and "food cart," the researcher developed a typology for viewing mobile food vending. While unique to New York City, this typology may prove instructive for other communities developing public policy for mobile food vending.

APPENDIX 1: EQUIPMENT REQUIREMENTS FOR CARTS AND TRUCKS BY TYPE OF FOOD SERVICE 79

Equipment Requirements: Mobile Food Vending Proce	essing Units
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		Equipment Required								
Food Type and Cooking Method	Examples	Potable Water	Washing Sinks for Food and Cooking Tools ¹	Hand Wash Sink	Waste Water Tank ²	Overhead Structure	Ventilation	Cold Holding	Hot Holding	Thermo- meters
Prepare and cook raw, potentially hazardous foods on the unit.	fried/grilled sausages poultry shish kebabs hamburgers eggs gyros	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Prepare potentially hazardous foods on the unit.	sandwiches raw fruits vegetables/salads breads bagels/rolls buttered or topped with cream cheese smoothies soft-serve ice cream									

Equipment Requirements: Mobile Food Vending Non-Processing Units

		Equipment Required								
Food Type and Preparation Method	Examples	Potable Water	Washing Sinks for Food and Cooking Tools	Hand Wash Sink	Waste Water Tank ¹	Overhead Structure	Ventilation	Cold Holding	Hot Holding	Thermo meters
Sell only unopened, prepackaged potentially hazardous foods that require temperature control.	prepackaged frozen desserts prepackaged sandwiches prepackaged and pre- sliced fruits/vegetables	No	No	No	Yes	Yes	No	Yes	Yes	Yes
Sell only non- potentially hazardous unpackaged or packaged foods that do not require temperature control.	brewed coffee/tea donuts pastries rolls/bagels buttered or topped with cream cheese at a commissary popcorn cotton candy plain/candied nuts soft pretzels chestnuts	Yes	No	No	Yes	Yes	Yes	No	No	No
Sell only non- potentially hazardous unpackaged or packaged foods that require temperature control.	boiled frankfurters/ sausages knishes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Sell uncut, whole fruits and vegetables.	Green Carts	No	No	No	No	Yes	No	No	No	No

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1. Mobile food vending units that create liquid waste from operations including, but not limited to, serving beverages such as coffee or tea, boiling

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