FOOD TRUCK FEVER: A SPATIO-POLITICAL ANALYSIS OF FOOD TRUCK ACTIVITY IN KANSAS CITY, MISSOURI

by

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A REPORT

submitted in partial fulfillment of the requirements for the degree

MASTER OF REGIONAL AND COMMUNITY PLANNING

Department of Landscape Architecture / Regional & Community Planning
College of Architecture, Planning and Design

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2014

Approved by:

Major Professor
Dr. Hyung Jin Kim
Abstract

Planning researchers and professionals have recently noted the social, economic, and cultural benefits food truck activity can provide within a community. As a result, the proliferation of food truck activity has challenged planners to reconsider the role of streets and urban spaces. Food trucks have the potential to enliven the urban landscape and enrich the quality of public life by serving as revitalization catalysts in urban spaces. While food trucks have become an increasingly visible aspect of street life, few jurisdictions have determined an effective manner to regulate and promote food truck activity.

The study recommends how cities can improve current food truck policies in order to enable the revitalization of urban spaces through food truck activity. Using Kansas City, Missouri as a study area, the primary question was explored through three secondary inquires and their related methods. First, a GIS-based spatial analysis identified the spatio-temporal characteristics of food truck locations via social media data mining processes. Second, a survey of food truck vendors and interviews with city staff highlighted stakeholder conflicts that pose barriers to food truck activity. Third, a policy review in key cities and the development of a policy framework helped determine appropriate policy guidelines that allow food trucks to operate effectively in a city.

The cumulative findings of the study informed food truck policy guidelines for Kansas City, Missouri. The policy framework also provides a structure for cities to utilize in order to analyze their own regulations. Sixteen significant policy areas are included in the framework, with the policy areas falling into one of three categories: permitting and enforcement, streets and spaces, or public health and safety. Appropriate policies that balance the needs of stakeholders allow food trucks to operate effectively, thus allowing cities to capitalize on the urban revitalization effects and other benefits that food truck activity provides within urban spaces.
FOOD TRUCK FEVER
A Spatio-Political Analysis of Food Truck Activity in Kansas City, Missouri

Deanne Petersen
Master of Regional and Community Planning
Spring 2014
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Thank you to my parents for their continued support of my education and instilling in me the drive to achieve my goals. Lastly, thank you to my classmates and friends for encouraging me throughout the past five years while constantly challenging me to be a better student, young professional, and person.
A NEW URBAN FORCE
The mobile food vending industry has an extensive history in the United States, dating back to 1691 when New Amsterdam (later New York City) began regulating food pushcarts. However, the industry has recently tapped into powerful consumer trends, particularly the use of social media and the desire for local food, ushering in the era of the modern, gourmet food truck.

For the purpose of this study, modern food trucks are large vehicles equipped with facilities for cooking and selling gourmet food. Food trucks, such as the vehicle depicted in Figure 1.1, move from location-to-location on a daily basis (Ibrahim, 2011). A 2011 report from the National Restaurant Association confirms the growth of food truck activity, finding that 59 percent of surveyed adults would be likely to visit a food truck—an increase in 12 percent from just one year prior (Stensson, 2011).

THE DILEMMA
Although a recent development in the urban landscape, the growth of food truck activity has sparked discussions concerning the relationship between the physical city and its inhabitants. Several urban theorists including Jane Jacobs, William Whyte, and Ray Oldenburg collectively argue that, “It is the streets, places, squares, parks, and other urban spaces that have the ability to support, facilitate, and promote public life, which is an essential counterpart to our private home and workspaces.” However, changes in land uses patterns and the dominance of the automobile has led to the decline of active streets and urban spaces in the United States (Mehta, 2007).

Furthermore, urban planners have observed an increase in food truck activity and its implications on urban spaces. For instance, professionals have recently noted the social, economic, and cultural benefits that food truck activity can provide within a community. As an urban cultural phenomenon, food trucks have the potential to activate underutilized spaces and streets through the allure of food (Wessel, 2012).

While food trucks have become an increasingly visible aspect of street life, few jurisdictions have determined an effective manner to regulate the industry. Urban

[Figure 1.1] Food Truck Lunch Break
Residents and workers in Kansas City, Missouri grab lunch from a food truck. (KCFoodTrucks, 2012b)
[Figure 1.2] An Active Urban Space
Food trucks vending near a plaza are a catalyst for social activity. (Kraft, 2012)
planners are normally staunch supporters of active urban spaces, but to a large extent, enthusiasm for street food has failed to appear in designs and policies (Cormier, 2012). As a rapidly evolving industry with great potential, it is critical to develop clear and tailored policies that balance the needs of stakeholders and promote the health, safety, and general welfare of the public.

THE INQUIRY
With the growing presence of food trucks in the urban landscape, the primary question arises: How can food truck policies be improved in order to use food truck activity as a catalyst for revitalizing urban spaces?

Using Kansas City, Missouri as a study area, the primary research question was explored through three secondary inquiries:

• What are the spatio-temporal characteristics of food trucks?
• What are the major conflicts between food trucks and city policies?
• What policies are needed to support the operation of food trucks?

To investigate the inquiries, the study first utilized a GIS-based spatial analysis to identify the spatio-temporal characteristics of food trucks in Kansas City, Missouri via social media data mining processes. Next, in order to understand the conflicts between stakeholders, a survey of food truck vendors and interviews with city staff highlighted policy issues that hinder food truck activity. Third, a policy review in key cities offered approaches that had possible implications in Kansas City, Missouri.

THE OUTCOME
The findings from the collective analysis, informed a food truck policy framework and guidelines. The sixteen policy areas presented in the framework are arranged into one of three broad categories:

• Permitting and Enforcement
• Streets and Spaces
• Public Health and Safety

Based on the analysis in Kansas City, Missouri, nine of the sixteen policy areas were identified as in need of improvement. Therefore, these nine areas received a greater focus when developing policy guidelines. The policy modifications enable food trucks to operate more effectively in Kansas City, Missouri, therefore allowing the city to capitalize on the urban revitalization effects of food truck activity, as depicted in Figure 1.2. As a recent topic in planning literature, the study provides policy direction for other jurisdictions and adds to the growing knowledge base related to the food truck industry and its associated benefits.

Thesis
Appropriate policies that balance the needs of stakeholders allow food trucks to operate effectively, thus augmenting the benefits and urban revitalization effects that food truck activity provides within a community.
Chapter 2 | Background

FOOD TRUCKS

Urban Space Revitalization

Social  Economic  Cultural

History

Conflicts

New Opportunities

Policy Approaches

Temporary Locations

Barriers

Post-2008

Local Government

Pre-2008

Others

Gap in Understanding
OVERVIEW

“Great civilizations, like great cities, share a common feature. Evolving with them and crucial to their growth and refinement are distinctive informal public gathering spaces. These become as much a part of the urban landscape as the citizen’s daily life and, invariably, they come to dominate the image of the city. Thus, its profusion of sidewalk cafes seems to be Paris. The soul of London resides in her many pubs; that of Florence in its teaming piazzas [...] and all represent fundamental institutions of median between the individual and the larger society.”
—Ray Oldenburg (Oldenburg, 1999)

The character of the fundamental spaces described by Oldenburg transform depending on the culture. In the United States, the street serves as a space for interaction and activity. One of the more recent uses that has inspired informal social interaction, yet puzzled urban planning professionals, is the growth of food truck activity.

In order to understand the dynamics of the industry, the history, community benefits, and conflicts that surround food trucks serve as the theoretical boundaries that define the research framework. However, a gap in understanding between new opportunities the industry affords and policy approaches provides an opportunity for study in order to embrace the benefits provided by food trucks. The theoretical boundaries are illustrated in Figure 2.1. Key sources utilized throughout the research process are shown in Figure 2.2.

AN URBAN SPACE DILEMMA

Ray Oldenburg, an American urban sociologist, noted the importance of public spaces in order to have a functioning civil and engaged society. He argues that public spaces, as areas that are open and accessible to all members in a society, serve as a facilitator of civic order by enabling interaction, the creation of social networks, and a sense of belonging (Oldenburg, 1999).

Public spaces present themselves within a multitude of cultures, both past and present. The agora, a rectangular open space surrounded by public structures,
was the classical public space of ancient Greece. By medieval Europe, public space had morphed into the commons, an area of land owned by a lord but open to all for use. In the Renaissance era, the plaza had become the epitome of public space, later replaced by the conversations and transactions that occurred in the coffeehouses of the Enlightenment period. Finally, many social and urban theorists argue that the public space of the current era is none other than the street. With the capacity to provide pavement, sidewalks, and lighting in the 19th century, streets, such as those illustrated in Figure 2.3, became the quintessential social public spaces of the modern age (Orum, 2010).

The Decline of Active Spaces in the Urban Landscape
With the shift in thinking to view the street as a social space rather than simply as a channel for movement, theorists argue that the social affordances offered in these urban spaces might be more important than the physical environment itself. However, in order to be a lively street and a dynamic urban space, a street must have the presence of a number of people engaged in a variety of social and rather informal activities (Mehta, 2007).

The same theorists also began to note that streets were gradually becoming less lively with changes in land use patterns and the growing dependence on the automobile. Jane Jacobs discussed this observation in *The Death and Life of Great American Cities*. In the 1950s, she was captivated by the lack of social vitality on streets and sidewalks and the decline of social energy in cities. The casual, public contact enabled at the local level by urban spaces—most of which she perceived as fortuitous and associated with errands—created a public identity, a web of trust, and a resource in time of neighborhood need. Jacobs believed the absence of this social capital was “a disaster to a city street,” of which its cultivation could not be institutionalized (Jacobs, 1961).

Nearly three decades later, Ray Oldenburg in his book, *The Great Good Place*, noted many of the same troubling issues plaguing urban spaces. He claimed that America did not rank well on the dimension of an informal public life due to a marked decline

![Figure 2.2] Literature Map
A visual representation of key sources utilized to define the theoretical parameters of the study. (Author, 2014)
[Figure 2.3] The Street as a Social Space

Times Square near 42nd Street in New York City displays the street as a quintessential social urban space in the United States in the 1920s. (Balcomb, 2013)
in gathering places—and without such places, the seemingly simple requirement of community has become elusive. Without such places, the urban environment fails to nourish the relationships and the diversity of human contact that are the essence of a city. Oldenburg equated this daily life amid urban sprawl to be like “elementary school without its recess periods” or “incurring the aches and pains of a softball game without the fun of getting together for a few beers afterward” (Oldenburg, 1999).

With the absence of an informal public life, Americans are denied the realm of satisfaction and social cohesion beyond the portals of home and work. In summary, Oldenburg stated, “America can point to many areas where she has made progress, but in the area of informal public life, she has lost ground and continues to lose it” (Oldenburg, 1999). Therefore, society faces a dilemma of providing modern counterparts of the once-familiar gathering places.

**Theoretical Remedies**

While Oldenburg admitted that no one can prescribe the solution to counter the decline of lively urban spaces in the United States, it is possible to describe some of the essential elements that any solution must include. In his work, he describes active urban spaces as “third places.” Third places, in his view, are sites outside of the home [the first place] and work [the second place] where individuals have an opportunity to meet and exchange ideas with other people. Like Jane Jacobs and William Whyte, whose studies analyzed the social life within small urban spaces, Oldenburg believed it is the interaction with other people that attracts people to spaces—that people avoid places that are empty because they are boring. As a result, he outlined a number of characteristics that define third places. In order to be a successful third place, or active urban space, the space should:

- be established on neutral ground that is inclusive and accessible to the public,
- have conversation as a main activity,
- possess a playful atmosphere, and
- serve as a home away from home (Oldenburg, 1999).

These spaces, which include streets, sidewalks, parks, and squares, may possess low profile in physical structure, but must be filled with people and have the full spectrum of humanity presented. Oldenburg argued that sites with these characteristics, which become more enriched as the flow of pedestrians increases, provide a deep sense of civil order and community (Oldenburg, 1999).

A sense of community, the feeling that one is part of a readily available, mutually supportive network of relationships, is an important aspect of psychological as well as social health in society (Fremlin, 2013). Therefore, third places, Oldenburg’s term for active urban spaces, provide the core setting necessary for an informal public life.
In his studies, Oldenburg also perceived a lack of discussion related to the benefits of third places. Therefore, he describes a number of community benefits including the expression of values, the exchange of ideas, community affiliation, and fun within appropriate constraints. He also explained a number of individual advantages acquired through interaction at third places: social and active participation, new perspectives, harmony, stress and spiritual relief, and friends outside of home and work (Oldenburg, 1999). Overall, scholars including Jacobs, Whyte, and Oldenburg, contend that urban spaces have the ability to support and promote public life, which is an essential counterpart to private home and work spaces (Mehta, 2007).

**Concrete Remedies**
Jacobs, Whyte, and Oldenburg argued that the charm of social urban spaces is the fact that activities in these places are informal—unplanned, unorganized, and unstructured. However, herein lies the challenge of activating these urban spaces without compromising the informal social activity that defines them. Interestingly, Whyte
suggested food could help give life to an underutilized space, as shown in Figure 2.4. Through a semi-controlled experiment in a New York City plaza, Whyte explained:

“At first there was no food. A moderate number of people used the place. At our suggestion, the management put in a food cart. It was an immediate success (the flower cart was not). Business continued to pick up for all three vendors that eventually occupied the space and even the restaurant that opened a small outdoor cafe.”

—William Whyte (Whyte, 1980)

By default, the food vendors became the caterers of the city’s outdoor public life. Interestingly, like Whyte, Oldenburg also concluded that food and drink are important hallmarks of third places. He specifically listed a number of ideal third places that involve food, including cafes, coffee shops, bars, and taverns (Oldenburg, 1999). However, a solution some have referred to as an “urban cultural phenomenon” has the potential to activate underutilized urban spaces and streets, once again, through the allure of street food. A contemporary condition that exemplifies the intersection of information technology, food, and the social life of urban spaces is the growing food truck industry (Wessel, 2012).

**HISTORY OF THE FOOD TRUCK INDUSTRY**

Although the concept of the modern food truck is relatively recent, the mobile food vending industry has an extensive history in the United States dating back to the 17th century. In 1691, New Amsterdam (later re-named New York City) began regulating food pushcarts similar to the cart depicted in Figure 2.5. Nearly two centuries later, Texas cattleman Charles Goodnight was credited with the creation of the chuckwagon, a mobile kitchen outfitted with food and cooking equipment to serve the settlers and cattle drivers on the American frontier. Over the decades, the chuckwagon, shown in Figure 2.6, morphed into other forms of mobile units including horse-drawn wagons that catered to lunch crowds in cities (Ibrahim, 2011).

In the 1970s in Los Angeles, the first food trucks made their presence within the landscape of the city. The original food

**[Figure 2.4] Whyte’s Observations**

A photograph taken by William Whyte during his observation of a food cart in an urban space. (Whyte, 1980)
trucks, such as the vehicle in Figure 2.7, were known as *loncheras*, or taco trucks. They served “homemade meals away from home” to factory and construction workers on fixed daily routes and, on occasion, at stationary locations. A stable economy and emerging Latino population allowed the industry to grow into a “Southern California phenomenon” that catered to low- and middle-income workers. Due to their association with working-class clientele and the perception that mobile kitchens were unsanitary, the trucks were labeled “roach coaches” or “maggot wagons.” In reality, *loncheras* required approval by the county’s Department of Public Health and were subject to the same oversight as storefront restaurants. Nonetheless, the stigma continued, with *loncheras* also receiving blame for unwelcomed immigration, traffic congestion, competition with storefront businesses, and crime (Ibrahim, 2011).

Despite the negative press, the *loncheras* helped pave the way for a new form of food truck. The economic recession in 2008 served as a catalyst for the recent boom in the industry. Chefs found themselves struggling to keep restaurants afloat during the recession, yet recognized the tendency of individuals to gravitate towards less expensive “comfort food” during adverse economic times (Ibrahim, 2011). Realizing that amassing the financial capital necessary to manage a restaurant during the recession would be a difficult task, many professionals launched food trucks that required less investment. By tapping into recent consumer trends, particularly the use of social media and the growing desire for local food, the industry ushered in the era of the modern, gourmet food truck. Modern food trucks are large vehicles equipped with facilities for cooking and selling gourmet food that move from location-to-location on a daily basis (Ibrahim, 2011).

Denouncing the “roach coach” reputation, these “Twittering trucks” are upscale mobile vending units that use social media to announce their temporary location. Unlike its *lonchera* predecessors, modern food trucks offer a more professional aesthetic as well as a wide variety of quick, gourmet food options depending on the vendor’s specialty. The food trucks are also becoming increasingly appealing to a more mainstream audience and white-collar demographic. With this evolution within the industry, a visit to a food truck has become a social activity that activates urban spaces and fosters community (Ibrahim, 2011).

Chef Roy Choi, co-founder of the Kogi Korean BBQ truck seen in Figure 2.8, is often hailed as the “father of the modern food truck.” The food truck, which began operating in Los Angeles, California in November 2008, gradually became a traveling landmark with its unique blend of Korean and Mexican barbeque. After being named “America’s First Viral Eatery”
[Figure 2.5] Pushcart
An example of an early pushcart in New York City, circa 1906. (Detroit Publishing Company, 2012)

[Figure 2.6] Chuckwagon
An example of a chuckwagon near a Texas roundup. (Jackson, 1900)
[Figure 2.7] Lonchera
An example of a *lonchera*, or taco truck.
(Stone, 2006)

[Figure 2.8] Kogi Food Truck
The Kogi Korean BBQ food truck in Los Angeles.
(Alpha+ Collective, 2011)
regulations to control and limit vending opportunities. As an informal sector of the economy, debates regarding the value and appropriateness of vending have occurred internationally as well as in the United States. Praised by many for bringing vitality and diversity to city streets and urban spaces, vending is often considered to occupy the “lowest rung on the ladder of capitalism” (Ball, 2002).

CONFLICTS AND CONTROVERSIES

Although the food trucks focused upon in this study constitute a very specific type of street vending, the industry has still faced controversies and conflicts, often involving policy makers and businesses who view it as an unsightly nuisance and threat to off-street commerce. Just as street vendors have found themselves at odds with municipalities attempting to control urban spaces over the decades, the modern food truck industry is forcing cities to reexamine outdated vending regulations. The following outlines a dialogue of arguments raised against the food truck industry in the United States.

Competition with Businesses

The most employed and well-known argument involves increased competition in the restaurant industry due to the addition of food trucks into the culinary scheme. Some storefront restaurants claim that food trucks possess an unfair advantage due to their mobility and capacity to locate in

by Newsweek in 2009, Kogi expanded its operations to include five food trucks and two restaurants by 2011 (Choy, 2011).

Studies conducted by the National Restaurant Association in 2011 align with Kogi’s experience but on a national scale, finding that the food truck industry is the fastest growing component of the restaurant industry’s 70 different segments (MacDonald, 2011). In addition, 59 percent of surveyed adults expressed that they would be likely to visit a food truck, an increase of 12 percent from just one year prior. Studies also expect the food truck industry to generate between 3 and 4 percent of the total restaurant revenue—about $2.7 billion—by 2017, a fourfold increase from 2012. As of 2011, food truck activity was more prevalent in the Northeastern and Western states, as depicted in Figure 2.9. However, the industry is expected to expand geographically, becoming more prevalent in the Midwest and Southern regions as the phenomenon moves inland from the coasts (Stensson, 2011). “It’s definitely a long-term trend,” states Hudson Riehle of the Research and Knowledge Group for the National Restaurant Association (Emergent Research, 2012). With the exponential growth and its increasingly positive view, food trucks are becoming common elements in urban spaces nationwide.

Along with the presence of street vendors over the decades, there have been
“Food trucks are one of the hottest trends in the restaurant industry right now, and consumers are showing increasing interest in mobile food service.”
—National Restaurant Association
close proximity to other businesses, thus drawing customers away from permanent establishments. Others assert that vendors obstruct the view of stores, block entrances, and detract from the market image a retail district may be attempting to convey (Bromley, 2000; Gall, 2012).

However, claims that food trucks have a negative impact on local restaurants are not only unsupported, but are contradicted by experiences in Los Angeles, California and Austin, Texas. The growth of the food truck industry in Los Angeles, the birthplace of the modern food truck, has not diminished the city’s vibrant restaurant scene. In fact, customers in a recent Zagat survey reported that they believe the restaurant scene has improved over the past several years. In Austin, restaurant owners generally agree that local food trucks have helped boost the industry as a whole. In response to these developments, restaurateurs in Pittsburgh, Pennsylvania have even requested that city officials remove restrictive food truck regulations as they have recognized that “cities with the most vibrant food truck scenes also have booming restaurant industries” (Gall, 2012).

While food trucks ignite increased culinary competition, just as the introduction of any other restaurant would, studies reveal that food trucks primarily compete with fast-food establishments, not full-service restaurants. Lunch customers, who comprise of approximately two-thirds of food truck patrons, are much more likely to eat at a fast-food restaurant (48 percent) that offers quick service as opposed to dining at a full-service restaurant (11 percent) (Emergent Research, 2012; Marte, 2012). In addition, each sector also attracts a different type of consumer. Food truck vendors cannot offer many of the amenities storefront restaurants take for granted, including climate-controlled conditions, available parking, ambiance, comfortable seating, customer service, and a full stockroom that is able to consistently meet the needs of a larger quantity of customers (Kettles, 2004; Frommer, 2012; Gall, 2012).

As a result, restaurants and food trucks offer customers different experiences, and the customers’ destination choice will vary depending on their preference at that moment. In fact, restaurants and fast-food chains have begun launching their

[Figure 2.9] Food Truck Popularity
The graph displays the number of consumers who saw a food truck in their community in 2011. While most prevalent on the Northeastern and Western coasts, the industry is gradually spreading inward towards the Midwest. (Author, 2014)
own food truck initiatives after perceiving the increase in market reach they can achieve by offering both types of dining experiences. According to the National Restaurant Association, 26 percent of fast-food chains and a growing number of full-service restaurants have expressed interest in entering the food truck market (Emergent Research, 2012). Therefore, food trucks do not have a significant negative impact on existing food establishments, particularly traditional full-service restaurants.

Although a handful of restaurant owners still take issue regarding the proximity of food trucks to their establishments, vendors in Washington D.C. have found that the majority support the growth of the food truck industry. Many restaurateurs view food trucks as a means to cultivate healthy competition, resulting in more innovative and quality products. Nevertheless, out of respect for their restaurant counterparts, vendors in the D.C. Food Truck Association created a Code of Conduct with a provision to avoid parking near restaurants that serve the same food.

On other occasions, food trucks have collaborated with bars and restaurants to complement the establishment by serving a complementary item—attracting customers for both businesses (Morris, 2012; Tanenbaum, 2012). The majority of vendors seek to develop a good relationship with neighboring businesses and remedy situations as necessary, sharing that “there will only be problems if you [business owners] are not community-oriented” (Beresky, 2011).

Besides cases aimed at food trucks’ ability to locate in proximity to storefront businesses, another unfair advantage argument relates to finances. The typical food truck requires $55,000 to $75,000 in startup costs, substantially less than the $200,000 to $500,000 or more required to open a storefront establishment (Emergent Research, 2012). However, food trucks are subject to many of the same costs restaurants face, including liability insurance, licensing fees, and sales and income tax. Most cities also require food trucks to rent space with a commissary where they can clean their vehicle, store inventory, and partially prepare food—similar in effect to restaurants that either pay property taxes or rent space. In addition, food truck owners must cover expenses related to their vehicle and often pay for multiple permits to operate within several jurisdictions.

Despite the costs that are common to both types of businesses, it is true that the financial capital needed to run a food truck business is less than a traditional restaurant. However, restaurants typically receive a higher return for investing in a fixed location—their larger investment enables them to offer services vendors cannot. Both types simply reflect different business models, and food trucks forgo
The judge, who called the ordinance a “naked restraint of trade,” presented three holdings in the court case:

- The ordinance was too ambiguous to enforce as the periods for operation were unclear.
- The ordinance was pre-empted by California State Law as it conflicted with the existing California vehicle code, which states that regulation of vehicles can only occur for public safety reasons.
- The ordinance essentially prohibited food trucks by enacting arbitrary 30- and 60-minute time limits that made it impossible for vendors to set up, cook, and serve customers (Tway, 2011).

In El Paso, Texas, a 2009 ordinance prohibiting food trucks from operating within 1,000 feet of food establishments was overturned as it left no reasonable locations for vendors to operate in the city (Needleman, 2012). A similar ordinance in Chicago, Illinois that dictates a 200-foot rule also possess no legitimate safety justification, thus becoming a litigation target for the Institute of Justice, an organization committed to economic liberty. “Economic protectionism is not a legitimate governmental interest,” explains Gall, a senior attorney at the Institute of Justice (Linnekin, 2012). These cases outline that the local regulation of food trucks can only be based on public safety concerns and that business competition is not a justifiable reason for vendor regulation.
Overall, attitudes within the restaurant industry are shifting to reflect the interests of the growing food truck community (Needleman, 2012). The food truck industry has not only gained public support over the past few years but political backing as well. With these recent strides, culinary experts are beginning to note that the food truck phenomenon is not just a fad but a long-term trend that can positively shape the future of the restaurant industry.

### Health and Safety Concerns

Food trucks can pose public health issues because their products may be exposed to environmental elements such as the sun, air pollution, and contamination by passersby (Bromley, 2000). According to the Food and Drug Administration, over two thousand different state and local agencies in the United States are responsible for inspecting food trucks. While regulations typically require vendors to have hot and cold running water, refrigeration, and proper disposal of waste, the large number of agencies enforcing the codes means that standards can vary widely. While the lack of consistency related to food storage and handling on food trucks raises red flags, regulators explain that most problems arise when vendors illegally prepare and store food at home (Marte, 2012). While it can be more difficult for officials to track down mobile vendors if an outbreak of food poisoning occurs, research has found that food trucks tend to be inspected more frequently than their storefront counterparts (Gall, 2012; Nagourney, 2010). Dalton, an environmental health specialist with the Southern Nevada Health District explains, “most of the complaints [about food trucks] seem to come from local food establishments that are in competition with them, and roughly 80 percent of the complaints prove to be unsubstantiated” (Marte, 2012). In fact, when food trucks were inspected in Los Angeles from May 2009 through May 2012, on average, the food trucks were just as sanitary as the restaurants (Gall, 2012; Nagourney, 2012).

The health and food safety risks are common for all food vendors, mobile or not. Moreover, in some communities, food vendors welcome health inspections. For example, in 2010, Los Angeles announced that mobile food vendors would be subject to the same letter-grade system as storefront restaurants. Mobile food owners welcomed the change as an opportunity to be held to the same regulations as restaurants and dispel the old “roach coach” reputation (Frommer, 2012). More than 90 percent of lunchtime survey respondents in San Francisco, California also rated food truck quality as good or excellent, displaying the public’s increasing acceptance of food trucks as safe meal options (Emergent Research, 2012).

### Tax Evasion and Regulation

The increasing demand for street food, sometimes coupled with restrictive regulations, can lead to a growing number
of unlicensed vendors. New York City sets a cap on the number of permits operating within the city, currently with a closed waiting list. For vendors, this can amount to waiting up to ten years to legally obtain approval, leading some to acquire permits illegally on the black market or set up without a permit (Marte, 2012).

Unlicensed vendors can fail to charge sales tax that produces revenue for the community or avoid paying taxes on their earnings, undercutting their competitors (Bromley, 2000). However, in this case, unlicensed vendors are not only detested by government officials and storefront restaurants but licensed vendors as well. Licensed vendors and established food truck associations dislike the poor image these unlicensed owners bring to the industry, thus creating a natural form of enforcement. The same tool that has led to the rise of the food truck industry, social media outlets like Facebook and Twitter, also helps inspectors and regulators locate food trucks for surprise inspections (Marte, 2012). While the issue of unlicensed vendors clearly poses concerns, as is with any unpermitted business, perhaps a strategy to improve the situation is to communicate clear guidelines that focus on legitimate public safety concerns without suppressing food truck activity.

**Congestion**

Another argument raised against street vendors is that they contribute to vehicular and pedestrian congestion as food trucks may concentrate heavily in a few locations. As a result, opponents claim that food trucks may impede the flow of traffic, distract drivers, cause accidents, increase levels of vehicle-generated air pollution, and create conflicts over customer parking (Bromley, 2000; Miller, 2011). Although critics complain that food trucks cause harmful congestion, there is currently no evidence to support the claim. To test it, the Institute of Justice measured foot traffic and congestion in Washington D.C. in areas where food trucks were present on several different days. The study found that the presence of a food truck did not drastically increase congestion. In fact, the average time it took a pedestrian to travel the block varied by only one second when a food truck was added to the equation.

Furthermore, the researchers documented a phenomenon that is common to anyone who has seen a food truck in action—customers spontaneously formed a single-file line along the edge of the sidewalk so as not to inhibit other pedestrians (Frommer, 2012; Gall, 2012). In fact, the increase in pedestrians may actually cause drivers to slow down and pay closer attention, thus placing vehicles and pedestrians on an equal footing. Food trucks may reduce road congestion as well by providing dining options near workplaces rather than forcing employees to travel by vehicle due to the separate land uses created by traditional zoning.
Appearance and Aesthetics
Vendors are sometimes considered unsightly as they may generate unwanted noise and trash (Bromley, 2000). Due to a heightened intensity of use, a cluster of vendors on a site may also negatively impact the surrounding area due to a lack of amenities or facilities (Flores, 2010). The argument has some theoretical support, as Hardin stated in his article, The Tragedy of the Commons, that resources owned in common are destined for overuse. Each user of the urban space enjoys all the benefits from its use, but bears only a portion of the cost of its use. Theoretically, this implies that because food truck vendors do not directly pay to utilize the space, they have no reason to maintain the condition of the space (Kettles, 2004).

On the other hand, there is no evidence to support that food truck patrons are more likely to litter compared to customers of fast-food restaurants or individuals who eat their own packed lunch. Most food truck vendors, besides the fact that they are usually required by municipal law to provide a trash receptacle for customer

[Figure 2.10]
Perception of Food Trucks
According to a food truck study in Portland, Oregon a large majority of survey respondents had a very positive perception of food trucks. (Author, 2014)
use, are conscientious about removing litter from areas where they operate. Vendors are generally aware of complaints by neighbors and proactively work to keep service locations cleaner than how they found them, particularly those who frequent a regular location (Gall, 2012; Kettles, 2004; Tanenbaum 2012).

Related to the aesthetics of the space is the perception of the food truck itself. As long as pedestrians and motorists are not bombarded by solicitations, which is more so the case with traditional vendors such as pushcarts, the opinion of food trucks is generally positive (Bromley, 2000). Figure 2.10 describes a Portland, Oregon study that concluded that 94 percent of respondents “had a very positive perception of food trucks” (Mueller, 2011). Another Portland study established that a vehicle’s exterior appearance did not affect the overall opinion of the food truck (Flores, 2010).

**Summary of Conflicts**

In conclusion, while several skeptics have outlined arguments against vending, few studies have actually been conducted to validate these arguments. However, the current trend indicates that the industry will continue to overcome conflicts and increase its presence in the urban fabric. With 91 percent of surveyed food truck customers indicating that they would continue to support food trucks over the coming years, it is unlikely that the food truck industry will succumb to obstacles and become stagnant in the near future (Flores, 2010).

**THE BENEFITS OF FOOD TRUCKS**

Whereas the preceding discussion highlighted the common arguments for and against the food truck industry, the following section articulates the benefits food truck activity can provide within a community. The benefits are organized into three broad categories: social, economic, or cultural.

**Social Benefits**

One of the most critical benefits food trucks can provide within a community is the ability to add social vitality to the streetscape and underutilized spaces. For instance, one theory expresses that the boom in the food truck industry is a creative response to the current urban form characterized by restrictive zoning and mono-cultural land use built for the automobile. Rather than waiting for a top-down approach to resolve the situation, food trucks serve as a form of tactical urbanism that can supplement formalized planning methods (Tanenbaum, 2012). By offering quick, temporary activities, food trucks can make urban spaces more enjoyable by bringing life to dull areas. Due to their mobile and temporary nature, food trucks can fill vacuums that are unable to be filled by permanent businesses that may require a constant customer base.
from morning until night. They also offer interim uses on vacant lots, brownfields, and underutilized surface parking lots (Bromley, 2000; Ball, 2002; Flores, 2010; Kavanagh, 2011; Tanenbaum, 2012). In addition, food trucks operating in cities that experience winter weather have been able to transition their summer cuisine into winter fare or even meals-on-wheels operations that invigorate spaces during colder temperatures when people tend to hibernate indoors (Cormier, 2012).

It is also important to note that food trucks serve as a way to activate spaces through private investment rather than public spending, which is particularly important in an era of declining municipal budgets. Overall, food trucks serve as small and affordable catalysts for urban revitalization by bringing activity and energy to underutilized spaces.

By creating lively spaces with more activity, food trucks offer increased opportunities for social interaction that can build community, a supportive network of relationships. They can also help promote walkability due to their ability to locate temporarily closer to neighborhoods or businesses where individuals can walk to dining options. For example, Portland’s updated long-range plan calls for “twenty minute neighborhoods” to be in place by 2030. In order to reach that goal, 90 percent of residents should be able to easily walk or bike, in twenty minutes or less, to meet all basic needs (Beresky, 2011). Portland envisions food trucks playing a role in this transformation by providing fresh, local food options to residents, which in turn promotes physical activity and health. By increasing social activity and interaction in urban spaces, food trucks can help foster safer urban environments. According to Jane Jacobs, “a well used street is apt to be a safe street” (Jacobs, 1961). Therefore, the increase in activity generated by food trucks adds more “eyes on the street” to deter crime and other undesirable activities. For instance, street vendors in New York City proved that they could be an effective force in preventing crime in May 2010. Several vendors who were familiar with the area noticed a suspicious vehicle parked nearby. After notifying authorities, police determined the car contained a bomb and were able to deactivate the device before causing harm. As a result, the vendors acted as a critical line of defense because of their presence and familiarity in the area (Frommer, 2012).

**Economic Benefits**

As small business owners, many food truck owners are rooted in the community. Therefore, revenue through licensing fees, sales and income tax, and other sources remain within the community. As part of the local economy, the industry provides revenue for other businesses that sell or rent to food trucks (Bromley, 2000). With the growing affinity towards local businesses, vendors can provide local
better future, or a passionate means to support one’s livelihood, entrepreneurs are drawn to food trucks due to its more affordable start-up costs. As financial capital is gained, vendors can build successful storefront businesses and move up the economic ladder (Bromley, 2000; Frommer, 2011). Therefore, operating a food truck can be a way out of poverty or unemployment and allows vendors to sustain themselves and their families. Thus, vending can serve as a social safety net, which is a less expensive option for the government compared to providing welfare support or expanding efforts to assist those in desperate situations. Vending also offers workers considerable flexibility in hours and levels of activity, consequently providing choices in work locations and childcare obligations, or as an extra means of employment to increase gross income (Bromley, 2000; Flores, 2010).

Cultural Benefits
Similar to the way in which vending serves as a laboratory for entrepreneurship, food trucks can test new markets, concepts, and recipes at low costs. As vendors tend to have more personal interaction with their customers, vending allows owners to gain insight into patron preferences and continue to improve offerings. By presenting new products and experiences, food trucks can contribute to the authenticity and culture of a city (Bromley, 2000; Mueller, 2011; Emergent Research, 2012). Food trucks also greatly expand the range of places and times where goods can be provided, which not only offers the social benefits explained previously but provides positive economic impacts as well. They can save traveling effort for consumers and satisfy demands that might otherwise be unmet (Bromley, 2000). For instance, food trucks serve as an effective way to cater to seasonal, sporadic, and special events where there could never be prolonged demand to sustain a permanent business.

They also have the potential to meet the needs of households in food deserts, areas where nutritious food is unavailable or only available at extremely high prices. Food deserts most frequently occur in low-income and minority neighborhoods where operating a grocery store requires higher overhead costs. Evidence indicates that smaller businesses, such as food trucks, can make a significant impact on a neighborhood’s food supply and increase a community’s quality of life by improving access to food (Frommer, 2012).

In addition to promoting economic activity and meeting consumer needs, food trucks provide options for entrepreneurship and income mobility, especially for minorities and immigrants. Whether it is the prospect of being self-employed, the promise of a
the diversity of food options within a community. Larger cities might have many food options, yet individuals tend to spend most of their time closer to home and work. Over time, the food options in those areas can become repetitive; however, food trucks can add variety and provide new options for consumers without requiring them to travel long distances (Frommer, 2012). With the increasing homogeneity of commercial areas and the loss of local culture associated with that trend, the diversity of food enabled by food trucks allows the industry to be an asset within

More than 80 percent of interviewees in a San Francisco study used words like “fun, exciting, new, different, unusual, and unique” when asked why they chose to dine at a food truck, displaying the cultural benefits the industry can provide within a community (Emergent Research, 2012). Because food trucks do not have a fixed location, they can also serve a larger customer base, which is critical when selling niche products. Therefore, vendors can specialize in ethnic or unique products that are not carried by mainstream businesses. Specialization also increases

**Figure 2.11** Food Truck Benefits
A synthesis of the social, economic, and cultural benefits food trucks provide within a community. (Author, 2014)

<table>
<thead>
<tr>
<th>Income mobility</th>
<th>Test new recipes</th>
<th>Local revenue</th>
<th>Satisfy unmet demands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community interaction</td>
<td>Test new recipes</td>
<td>Local revenue</td>
<td>Satisfy unmet demands</td>
</tr>
<tr>
<td>Foster safer environments</td>
<td>Culture</td>
<td>Interim uses on underutilized lots</td>
<td></td>
</tr>
<tr>
<td>Fresh, local food</td>
<td>Entrepreneurship</td>
<td>Niche products</td>
<td>Cater to seasonal or temporary events</td>
</tr>
<tr>
<td>Catalysts for revitalization</td>
<td>Street vitality</td>
<td>Locate near offices and homes to provide options</td>
<td></td>
</tr>
</tbody>
</table>
countries as it constitutes a major sector of the informal economy. However, mobile vending has been researched only somewhat domestically. A majority of the literature is devoted to a few key vending issues including public health, the benefits and drawbacks of vending as an economic activity, and the cultural nature of street vending. In particular, the topic related to regulatory implications in the United States has had a few studies in the early 2000s.

In 2001, Dyrness of the University of Southern California worked with illegal street vendors in MacArthur Park in Los Angeles to respond to the challenge of legitimizing the economic activity of these vendors (Dyrness, 2001). A few years later, Kettles expanded on the findings by conducting interviews in Los Angeles to disprove some of the myths related to the industry (Kettles, 2004; Kettles, 2006). During the same period, Ball completed a case study in Atlanta, Georgia that supported vending ordinance revisions for the city in order to confront others who were calling for the elimination of the vending program altogether (Ball, 2002).

However, because these studies were completed prior to the food truck industry’s introduction in 2008, they focus on all types of street vending. As a result, they are less relevant to the modern food truck industry. Nonetheless, it is clear from their research that policy modifications require cooperation between many levels
of government and multiple vendors in a city. The following studies were completed post-2008 after the explosion of food truck activity in the United States.

**Public Perception of Food Trucks and the Spaces They Occupy**

As interest in food truck activity began to increase following its growth in 2008, researchers began to take note of the industry’s role within the urban fabric. As they considered the importance of urban spaces and streets in fostering connections between people, two studies in California investigated the impact of food trucks on the public perception of space.

In Los Angeles, Tway utilized a survey of food truck customers and interviews with experts involved in policy formation to assess the views of stakeholders. Overall, it was concluded that mobile food vendors were generally perceived positively and that the urban spaces they occupy are seen as more vibrant and active with their presence. The customers’ most commonly used words included “fun, new, exciting, friendly, convenient, vibrant, and clean.” Tway also noted that almost all survey participants stated that they conversed with someone new while at the food truck, indicating the influence food truck activity has in increasing urban space socialization.

From the government’s perspective, an interviewed planner indicated her belief that food trucks contribute to the vibrancy of urban spaces, and that as a planner it was a “huge victory” to see people out of their cars. She also mentioned that, unfortunately, one of the pitfalls of land use laws is that they rarely change as quickly as society and the demographic needs of the city (Tway, 2011).

A related public perception study in San Francisco also utilized a survey of food truck customers, but rather engaged study participants in identifying the quality of the place based on an approach utilized by William Whyte. Participants were prompted to complete a Likert scale ranking of elements of place including vegetation, seating, shade, enclosure, pedestrian activity, food, and other characteristics. They were also asked to what degree each element contributed to the quality of their experience. The results, depicted in Figure 2.12, suggested that individuals were becoming less cognitively aware of the

**[Figure 2.12] Descriptive Words**

A food truck study in San Francisco, California displayed that the positive perceptions greatly outweighed the negative comments. (Author, 2014)
environmental attributes of the place and more connected to the social experience within the space. While pedestrian amenities were seen as beneficial, they were not necessarily required for the individual user to have a quality experience. Therefore, seemingly average or underdeveloped urban spaces could redefine social functions by generating highly connected social opportunities (Wessel, 2012).

While both of these investigations provided insight into the perception of users, as well as public officials, the authors noted the political turmoil they perceived throughout their study. As a result, they recommended further study of food truck location choices and challenges in order to determine an appropriate role of government in mobile food vending regulation.

**Regulatory Case Studies**

As the industry expanded beyond the “food truck capitol” of Los Angeles, planners began to analyze food truck activity within their own city and consider its policy implications. One well-known and comprehensive study was produced by the Institute for Justice in 2011. The report examined five common types of vending regulations in the fifty largest cities in the United States. The study included a review of public property bans, restricted zones, proximity bans, stop-and-wait restrictions, and duration regulations (Frommer, 2011). The Institute of Justice vending study reported that:

- Eleven cities ban vending on public property for some or all goods, forcing vendors to partner with private property owners in order to operate.
- In 34 cities, entire areas are off-limits to vendors, often including potentially lucrative areas.
- Twenty cities ban vendors from locating near businesses selling similar goods.
- Five cities prevent mobile vendors from stopping and parking unless flagged by a customer.
- Nineteen cities require mobile vendors to change locations after a brief amount of time (Frommer, 2011).

A largely referenced Portland, Oregon study, *Food Cartology*, also provided key findings to direct policy discussions. Although this study includes vendors other than food trucks, such as food carts and stationary trucks, in its analysis, the city determined that the units were a possible avenue for furthering city objectives. The objectives included encouraging street vitality, neighborhood livability, and economic development. Because the study employed vendor surveys, public surveys, and site inventories, Portland was able to produce evidence to support vending activity (Flores, 2010; Kapell, 2012).

The popularity of the *Food Cartology* study within the sphere of planning prompted other research endeavors in Texas and South Carolina. A thesis presented by
Howell of the University of Texas involved in-depth interviews and context analysis to explore how cities might proactively leverage the benefits of food truck activity using Austin, Texas as a study area. The author used a naturalistic frame of inquiry that allowed food truck stakeholders to share experiences rather than answer researcher-biased questions. Howell then coded the results to create a pattern of meaning from the different perspectives within Austin’s street food culture. While Howell indicated that the research findings about interim land uses, entrepreneurial activity, and cultural expressions could be used as “public engagement input” to inform policy decisions, he did not construct specific recommendations for Austin, Texas (Mueller, 2011).

A study completed by Tanenbaum of Clemson University analyzed the possibility of food trucks in Greenville, South Carolina. In the previous study, Austin already possessed a growing food truck industry. However, the industry had not yet developed in Greenville. As a result, Tanenbaum first used a GIS analysis of demographic and business data to determine if food trucks would be appropriate for the city. After determining that there was sufficient demand, he examined policies in fifteen cities in order to present policy makers in Greenville with a menu of options that illustrated approaches to food truck regulation (Tanenbaum, 2012). While the key consideration for selection of case studies was the presence of a developed food truck scene, Tanenbaum also attempted to select cities that were similar in size or geographic location to Greenville. The regulations analyzed included:

- licensing and permitting procedures
- public health oversight of food truck operations
- the operation of food trucks on public and private property
- protection of neighborhood quality of life and environmental integrity
- quality and quantity of information available through online sources
- economic development programs applicable to food trucks (i.e. incentives, training)

By providing a number of recommendations to support a “regulatory architecture that encourages food trucks,” the study aimed to develop a new food truck industry in Greenville (Tanenbaum, 2012).

Besides research to inform city policies, the growth of food trucks has also spurred innovative ideas. For example, Tester, a pediatrician with a research focus on childhood obesity, conducted an analysis of public health policies relevant to mobile food vending. Tester and her associates believe that food trucks have the capacity to reach places that lack access to food establishments or grocery stores. Therefore, she claims that policies and incentives could be tailored to promote healthy food options, mobile farmer’s
[Table 2.1] Precedent Studies

A synthesis of post-2008 food truck studies in the United States. Gaps in the studies were also identified to determine future study opportunities. (Author, 2014)

<table>
<thead>
<tr>
<th>Study</th>
<th>Method</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tester (2010)</td>
<td>Content analysis</td>
<td>Explore if food trucks have the capacity to reach places that lack access to food establishments or grocery stores</td>
</tr>
<tr>
<td>Ten U.S. cities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frommer (2011)</td>
<td>Content analysis</td>
<td>Examine the five common types of vending regulations</td>
</tr>
<tr>
<td>Fifty U.S. cities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mueller (2011)</td>
<td>Content analysis, naturalistic frame of inquiry interviews</td>
<td>Examine how to proactively leverage the beneficial impacts of food trucks</td>
</tr>
<tr>
<td>Austin, TX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tway (2011)</td>
<td>Location analysis, vendor survey, government interviews</td>
<td>Explore the impact of food trucks on the perception of urban space</td>
</tr>
<tr>
<td>Los Angeles, CA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kapell (2012)</td>
<td>Location analysis, public survey, vendor survey</td>
<td>Study the effects of food trucks and carts on street vitality, neighborhood livability, and economic development</td>
</tr>
<tr>
<td>Portland, OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanenbaum (2012)</td>
<td>GIS analysis, content analysis, case study of cities</td>
<td>Determine if the city should formulate and implement a policy to encourage the food truck industry to operate within the city</td>
</tr>
<tr>
<td>Greenville, SC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wessel (2012)</td>
<td>Customer survey, vendor survey, environmental audit</td>
<td>Understand the significance of food trucks in affecting human behavior and the quality of experience in urban spaces</td>
</tr>
<tr>
<td>San Francisco, CA</td>
<td></td>
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</tbody>
</table>
markets, and other creative uses (Tester, 2010). Although the feasibility of the ideas needs to be studied further, the research displays other possibilities for the food truck industry when regulated appropriately.

**Gaps in Understanding**

Notwithstanding the debates related to the food truck industry, discussed infra, this project treats the presence of food trucks in urban spaces as generally positive and desirable. These previous studies, summarized in Table 2.1, represent the research endeavors related to the modern food truck industry. While they provide a research foundation about the benefits of food truck activity and offer approaches to guide investigations, the policy implications have been understudied. As the food truck industry is rapidly evolving within an ever-changing regulatory environment, it will be critical to continue research in order to develop clear and tailored policies. Policies that allow food trucks to operate effectively will enable the urban revitalization effects confirmed in these precedent studies.

<table>
<thead>
<tr>
<th>Results</th>
<th>Gaps in Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identified Parks and Recreation Departments that provide incentives for healthy vending</td>
<td>Further understanding of the feasibility and sustainability of programs is needed; explore other innovative food truck uses</td>
</tr>
<tr>
<td>Identified common regulatory issues and general recommendations</td>
<td>All types of street vending; general recommendations but provides a starting point for future case study analysis</td>
</tr>
<tr>
<td>An understanding of the conditions and the emerging role food trucks play in neighborhoods; proposed a food truck demonstration site</td>
<td>Attempts to fill the gaps in understanding street food actors, but applies the findings to a park design rather than a policy framework</td>
</tr>
<tr>
<td>Generally positive perception of space when food trucks are present; urban spaces are viewed as more vibrant and active</td>
<td>Regulatory challenges and successes; location choices and patterns of vendors</td>
</tr>
<tr>
<td>Produced statistically significant data; informed policy discussion related to the updates of the Comprehensive Plan</td>
<td>All types of street vending; commonly referenced study that informs other research</td>
</tr>
<tr>
<td>General recommendations to create a regulatory architecture that could lead to a new food truck industry in the city</td>
<td>Recommendations within a city that currently does not have a food truck industry; provides research but does not include draft regulations</td>
</tr>
<tr>
<td>Customers were less cognitively aware of the environmental attributes of places and identified more with the social activity food trucks enabled</td>
<td>Regulatory challenges and successes</td>
</tr>
</tbody>
</table>
**STUDY GOAL**
Over the past several decades, cities have experienced a decline in active streets and social urban spaces. As Oldenburg expressed, it is difficult to prescribe one solution to the dilemma; however, cities can utilize smaller approaches.

Because food trucks have the ability to activate underutilized spaces and streets through the allure of street food, as shown in Figure 3.1, food trucks serve as a vehicle to reverse the decline of active urban spaces. In order for the industry to play this role, food trucks must be permitted to reasonably operate within a city. Yet, as noted in the literature, policies and other indirect restrictions can limit the industry’s ability to operate effectively. Therefore, the goal of the study is to determine appropriate policies for food trucks in order for food truck activity to serve as an urban catalyst to activate the street and urban spaces.

**Research Question**
With the many benefits food trucks offer within a city and their role in activating urban spaces, the primary question is:

How can food truck policies be improved in order to use food truck activity as a catalyst for revitalizing urban spaces?

The primary research question informed three secondary inquiries that were explored using Kansas City, Missouri as the study area. The overall research process, including the three inquiries and the methods utilized to examine each question, are outlined in Figure 3.2

**STUDY AREA**
Since the launch of the first modern food truck in Los Angeles in 2008, the industry has spread across the country to other areas, including the Kansas City region. Shown in Figure 3.3, the Kansas City region is the 29th largest metropolitan area in the United States. Spanning the Missouri-Kansas border in the heart of the country, the seven-county region is home to 2.1 million people (U.S. Census Bureau, 2012).

Kansas City, Missouri is the largest city in Missouri covering nearly 315 square miles with 464,310 residents (U.S. Census Bureau, 2012). As the central core of the

[Figure 3.1] Food in the West Bottoms
A Kansas City food truck located in an alley between buildings to serve customers in the West Bottoms District near the downtown core. (KCFoodTrucks, 2013b)
Dilemma
Decline of active streets and urban spaces

Opportunity
Ability for food trucks to serve as urban catalysts

Goal
Allow food trucks to operate effectively in order to activate urban spaces

Research Question
How can food truck policies be improved in order to use food truck activity as a catalyst for revitalizing urban spaces?

How?
Study Area: Kansas City, Missouri

**Inquiry #1**
What are the spatio-temporal characteristics of food trucks?

**Purpose**
To provide evidence about food truck activity in urban spaces

**Method**
Spatial analysis of food truck vendors

**Inquiry #2**
What are the major conflicts between food trucks and city policies?

**Purpose**
To identify areas in need of improvement in the current food truck policy

**Method**
Survey of food truck vendors and interviews with city staff

**Inquiry #3**
What policies are needed to support the operation of food trucks?

**Purpose**
To examine practices that may have implications and develop a policy framework

**Method**
Formation of a policy framework with insight from a review of policies in key cities

**Outcome**
Food truck policy framework for Kansas City, Missouri
years later in January 2013, several vendors formed the Kansas City Food Truck Association. As a team of independently-owned food trucks, one vendor describes the organization as “a brotherhood where everyone wants to see everyone succeed.” The association not only works together to coordinate events and assist members, but hopes to approach space and parking issues as a collective force to effectively work with others (MorningSky, 2013).

**Food Truck Industry in Kansas City**
Although it is difficult to pinpoint when the first food truck began operating in the Kansas City region, articles published by local media tend to indicate that the industry gained momentum in Kansas City in 2011 (Kansas City Star, 2013). About two

**Current Policies**
According to Kansas City, Missouri regulations, food trucks are classified as mobile units—vehicle-mounted restaurant type establishments designed to be readily movable (Kansas City Missouri, 2012c). Food trucks operating within Kansas City, Missouri must comply with the Kansas City Food Code adopted by the Health
Department. Last amended in 2005, the code requires vendors to meet certain guidelines related to the handling and preparation of food as well as the nature of the equipment and facilities (Kansas City Missouri, 2012b). If applicable conditions are satisfied, the Health Department is responsible for issuing mobile unit food permits. Currently, the permit application fee is $218 with a re-inspection fee of $122 each time a Food Inspector must examine the food truck. Permits require annual renewal after the satisfactory completion of an inspection (Kansas City Missouri, 2012a).

In addition to compliance with the Food Code, the Police Department is responsible for enforcing vending regulations outlined in the City Ordinances. Regulations applicable to food trucks are delineated in Chapter 50, Article XI: Street Vending (Kansas City, Missouri, 2012c). In general, most of the regulations pertain to prohibited locations, including:

- On any public street designated as a trafficway, boulevard, or parkway.
- Within 50 feet of a restaurant during the business’s operating hours.
- Within one block of a school during the 30 minute period preceding school or the 30 minute period after adjournment.
- In or upon any public street or space within the areas comprising of the Country Club Plaza, Kansas City Convention Center, Power & Light District, or Truman Sports Complex (Kansas City, Missouri, 2012c).

Other pertinent regulations include trash receptacle requirements and permit processes to vend on private property. Vending within any property under the jurisdiction of the Parks and Recreation Department is subject to additional regulations as well. The department charges a $500 annual permit fee per park and reserves the right to limit the number of permits issued. A clause in the policy grants allowances for the permit to cover multiple parks if a vendor meets specific “healthy vending” requirements (Kansas City, Missouri, 2006). However, the department also has the ability to exclude vendors for special events, thus requiring the vendor to obtain an additional special events permit in order to participate.

Both the regulations in Article XI: Street Vending and the Parks and Recreation Vending Policy were last updated in 2006. The complete policies are provided in Appendix B.

**Study Potential**

As a jurisdiction with street vending policies that pre-date the modern food truck industry, Kansas City, Missouri served as an area to study food truck activity and the policies that govern vendors. With the newly-organized Kansas City Food Truck Association seeking effective ways to interact with other stakeholders, they also served as a potential partner for exploring policy conditions in the city. By bridging the gaps in previous studies,
the urban planning field can find ways to embrace food truck activity and determine appropriate policies that allow the industry to serve as an urban catalyst to activate the street and urban spaces.

METHODOLOGY PHASES
Each of the three inquiries corresponded to three phases in the methodology. Each phase incorporated a specific method or methods to answer the inquiry.

Phase 1: Spatial Analysis
The first inquiry pertaining to the spatio-temporal characteristics of food trucks was addressed through a spatial analysis of locations. As mobile units, food trucks rely on social media, such as Twitter, to advertise their locations to customers. As a result, Twitter provided a simple and free method to extract location data. Directly asking vendors to recall locations would have been not only burdensome to vendors, but perhaps inaccurate as well. As a result, utilizing Twitter data served as the best method for tracking vending locations.

The locations of the sixteen food truck vendors were extracted via Twitter for a seven-month period from April 2013 through October 2013 in order to capture data during the seasonal peak of the industry. The food truck locations, listed in Appendix C, were geocoded in ArcGIS, a process of finding geographic coordinates from street addresses or intersections. Using interpolation tools in the ArcGIS Spatial Analyst extension, graphical representations of the data known as heat maps identified vending hotspots in the area. Because the food trucks operate

[Figure 3.4] Kansas City, Missouri Map
A reference map of Kansas City, Missouri, the study area for the analysis. (Author, 2014)
throughout the region, the collected locations were then audited to include only those within the Kansas City, Missouri study area. Next, demographic, socio-economic, and land use data was collected in order to examine spatial correlations with the food truck locations.

**Phase 2: Stakeholder Conflicts**

The spatial analysis phase provided important information related to the spatial characteristics of food trucks in urban spaces. The next step in the process involved understanding issues that impede the effective operation of food trucks in these spaces. Understanding issues and reasoning on both sides of the stakeholder spectrum involved engaging food truck vendors as well as city staff involved with policymaking and enforcement. Therefore, this phase of the methodology included both survey and interview components.

**Food Truck Vendor Survey**

An electronic survey of food truck vendors served as the primary method of research in order to identify current barriers to vending in Kansas City, Missouri. Most surveys aim to produce quantitative research that is statistically significant and projects results to a much large population. However, the intent of the survey was to be more exploratory and qualitative in nature in order to develop an understanding of food truck issues in the city. Typically, in-depth interviews or focus groups are utilized for this type of qualitative research. However, these two methods were not feasible due to a number of constraints. With a limited amount of time to complete this phase of the methodology, it would have been difficult to schedule in-person or phone interviews with several food truck vendors. Because the vendors also have varying schedules, arranging one or multiple focus groups would have also been difficult to organize due to time and travel limitations.

Although the survey did not produce statistically significant quantitative data, which was not the overall intent, administering a survey was more feasible due to pre-existing contacts made with the Kansas City Food Truck Association. As a result, the purposive sampling technique again targeted the sixteen vendors in the organization. The selection served three purposes. First, the vendors associated with the organization were more likely to participate in the study, particularly because the survey was sponsored by the organization’s President, thus increasing the response rate. Second, the members of the association tend to be more proactive in seeking ways to work with the community and expand the industry. As a result, the significance and outcome of the study likely enticed participation. Third, the sample frame again produced sixteen units of analysis, more than half of the vendors operating in the region (Kansas City Star, 2013). A slight bias may have existed by surveying only food truck vendors involved with the organization because they tend to
be more active in lobbying for reasonable policies. However, the overall risk of bias is minimal. For example, as active members within the industry, vendors may possess innovative ideas on how to improve the regulatory environment that less involved vendors may not have considered. The same sixteen vendors were also tracked via Twitter in the spatial analysis, thus allowing for consistency between the methodology phases.

To gain insight from the food truck vendor perspective, the survey questions were developed based on knowledge gained through the literature review, spatial analysis, and a review of the current policies in Kansas City, Missouri. The overall goal of the study is to determine appropriate regulations for food trucks in order for the industry to serve as an urban catalyst to activate the street and urban spaces. Therefore, the survey questions were distributed among five primary categories, listed below, that comprised of the most common issues extracted from the research:

- Current Dynamics
- Permitting and Enforcement
- Streets and Spaces
- Public Health and Safety
- Future Opportunities

The survey primarily included multiple choice and a five-point Likert-scale ranking questions with a few open-ended prompts. Overall, the intention was to facilitate quick and easy responses that still successfully gauged the opinions of vendors related to key policy areas. The survey questions are included in Appendix D.

Because the food truck vendors rely on e-mail and social media for their business to thrive, they were comfortable completing an electronic survey distributed via e-mail. The survey was available for a two-week period in early February, with a reminder before the survey closing. The distribution time was also convenient for the vendors as the survey was disseminated during the less demanding off-season. To protect the vendors’ identities, the responses were anonymous. The results were analyzed to identify vending issues in Kansas City, Missouri. Rather than produce statistically significant data, the targeted survey yielded quality data to support an evidence-based policy framework.

**City Staff Interviews**

In order to understand the perspective towards food trucks from a policy standpoint, a series of interviews were scheduled with key government stakeholders in late February. Again, due to time and travel constraints, the interviews were conducted over the phone depending on the individual’s availability.

The original sampling frame included all city staff familiar with the regulation of food trucks in Kansas City, Missouri. However, interviewees were selected...
through a snowball sampling method. The Kansas City section of the American Planning Association originally helped identify two key individuals—one within the Health Department and another involved with the Business Customer Service Center (BizCare). Individuals within these departments were interviewed first, and were then able to provide contacts for future interviews. To protect the interviewees’ identities, only the department he or she works within is included in the report. In total, interviews were held with employees in the following departments:

- Health
- Business Customer Service Center
- Public Works
- Police

Interestingly, the City Planning and Development Department reported very little interaction with the food truck industry. The extent of their involvement is limited to issuing temporary use permits for food truck events. As a result, a phone interview was not conducted with the City Planning and Development personnel. The same five categories used to arrange the vendor survey were also used to organize questions for the interviews, thus providing consistency throughout the study. Questions were developed for each category based on understanding gained through the literature review, spatial analysis, and vendor survey data. A recent article, Food Truck Feeding Frenzy, published in *Zoning Practice* by the American Planning Association, was particularly helpful in influencing the questions (Arroyo, 2013).

While the specific questions guided the conversations, the interviews also meandered as needed. In addition, some

[Figure 3.5] Key Cities for Policy Review

Food truck policies in four cities were reviewed in order to identify possible policy approaches. (Author, 2014)
subsequent questions were conditional on the interviewee’s response to the first question. Then, depending on the interviewee’s expertise or response, the inclusion of the questions was modified. The conversational flow of the dialogue allowed for a more adaptable, intimate discussion. The interview questions are included in Appendix E.

As with the survey, the interview results were coded to identify policy issues and policy reasoning. The combination of viewpoints through the vendor survey and city staff interviews helped identify sixteen policy areas. These policy areas became the focus for the policy framework in the final phase of the methodology.

**Phase 3: Policy Framework**

With the previous phases identifying food truck characteristics and issues in the policy structure, the final phase involved the creation of a food truck policy framework. Based on the three primary categories, a matrix was developed to investigate each policy area.

First, food truck policies in a few key cities were reviewed in order to identify practices that may inform possible approaches in Kansas City, Missouri. Because it was not feasible to study a multitude of cities, four key cities were selected. Each of the cities, shown in Figure 3.5, is also from one of the four regions commonly used by the National Restaurant Association:
- Washington D.C. (Northeast)
- Chicago, Illinois (Midwest)
- Austin, Texas (South)
- Portland, Oregon (West)

The four cities were selected due to their history of interaction with the food truck industry. The cities were also mentioned multiple times when reviewing previous literature. In addition, the cities were included on two “Best Food Truck Cities” lists—a 2012 Zagat study (a restaurant rating company) and a December 2013 list complied by Fodor’s Travel (a tourism resource website) (Bloomberg, 2012; Wasserman, 2013). Due to the industry having a greater presence in these areas, the cities have more experience applying regulation to food trucks. The food truck policies, as of early March 2014, were accessed electronically for each of the four cities. The policy review highlighted practices related to each policy area that served as possible approaches for the framework in Kansas City.

Then, the body of knowledge produced from the methodology phases informed guidelines for each policy area in the matrix. The culminating findings of the study allowed for the development of an evidence-based policy framework. Clear and tailored policies that address legitimate public concerns will allow the industry to serve as an urban catalyst to activate urban spaces in Kansas City, Missouri.
OVERVIEW

The first of the three research inquiries involved exploring the spatio-temporal characteristics of food trucks. The inquiry was addressed through a GIS-based spatial analysis in Kansas City, Missouri. Of the sixteen food trucks that are members of the Kansas City Food Truck Association, fifteen vendors utilize Twitter as a method for broadcasting their daily locations to customers. Therefore, posts were recorded from the Twitter feeds of these fifteen vendors for the seven-month period from April through October.

Only location-specific messages within the greater Kansas City region were collected. The seven-county region includes Platte, Clay, Jackson, and Cass Counties in Missouri and Wyandotte, Leavenworth, and Johnson Counties in Kansas. The messages primarily included street names or an intersection. However, for some Twitter posts, a company or building was described. In the cases where a specific business was discernible from the post, such as the Merriam Marketplace in Figure 4.1, the address was recorded after verifying the location.

Although the main focus of the study concerned food truck activity within the Kansas City, Missouri jurisdiction, the data was briefly analyzed at a regional scale. Based on the spatial distribution of the data, the study scope was then narrowed to a specific portion of Kansas City, Missouri. At the local level, the locations were examined in greater detail to study possible correlations with secondary data. The data included land use, demographic, and socio-economic information.

[Figure 4.1] Food Truck Fundraiser

Hundreds of families attended a food truck event at the Merriam Marketplace in the Kansas City region. (KCFoodTrucks, 2013a)
The greater Kansas City region consists of seven counties spanning the Missouri-Kansas border, with the core city outlined. The most frequented food truck locations in the region are highlighted. (Author, 2014)
CHAPTER 4 | SPATIAL ANALYSIS

The Twitter data extraction produced 635 food truck location points within the Kansas City region. The specific addresses for each of the location points are listed in Appendix C. The number of times that the location was visited during the study time frame is also displayed.

The data is depicted in Figure 4.2 as a proportional symbol map with the size of the circle representing the frequency of food truck visits. Slightly more than half of all locations (52%) are contained within the Kansas City, Missouri boundaries. Of these, the locations are primarily clustered near the downtown core of the city. However, nearly one-third of the points are located within the suburban portions of Johnson County, Kansas, often near commercial, office, and retail districts.

Within the seven-month study period, many locations were visited multiple times by one or more food truck vendors. In fact, 57 percent of the points included locations that were visited five or more times within the study frame. Twenty percent of the locations were distinct sites that were visited only once. In general, the results display that food truck vendors prefer to vend in familiar locations to attract a loyal and consistent customer base.

The most frequented locations in the Kansas City region included:

1. Truman Medical Center on Hospital Hill (35 occurrences)
2. A vacant lot known by locals as “The Truck Stop” at the intersection of 21st and Wyandotte in the Crossroads Arts District (29 occurrences)
3. The intersection of 199th and Metcalf in Stilwell, Kansas (29 occurrences)
4. Sprint Center entertainment arena in the Power & Light District (22 occurrences)
5. Merriam Marketplace community event pavilion (19 occurrences)
6. The parking lot of a large business, Freightquote, in south Kansas City (17 occurrences)

It is also interesting to note that another frequented site, just outside the seven-county region included a vineyard that was visited nineteen times. The winery invited a food truck to provide cuisine each weekend to complement the wine served by the establishment. The relationship displays the symbiotic, collaboration potential for food trucks and other businesses—not the stereotypical competition some claim.
The interpolated heat map displays the predicted frequency of food truck occurrences in each area. Four distinct hot spots are highlighted in the seven-county Kansas City region. (Author, 2014)
**Interpolation**

Using inverse distance weighted (IDW) interpolation, the point data and frequency fields were analyzed to create a graphical representation of the data as a heat map. This method implements the assumption that points that are close to one another are more alike than those that are farther apart. To predict a value at any unmeasured location, IDW uses the measured values surrounding the prediction location. The measured values closest to the prediction location have more influence, with the influence diminishing with distance (ESRI, 2013).

Three of the large hot spots, along with two smaller spots, are located in close proximity to the intersection of interstates. The crossroads of these major highways are usually prime locations for large businesses or destination nodes because of their accessible location. This combination of potential customers and accessibility likely appeals to food truck vendors as well, as evident by the interpolated predictions.

Figure 4.3 depicts the predicted frequency of food truck occurrences at each location. The predicted interpolation values were manually arranged into ten classes. The classes were selected based on natural groupings inherent in the data, thus maximizing the differences between classes. Because of the distribution of the data, the technique provided the best visual representation of the clustering and scattering of food trucks in the seven-county Kansas City region.

As expected, the most concentrated areas align with areas that contained the most frequented locations. These areas included:

A. The downtown core of Kansas City, Missouri, particularly near the Truman Medical Center

B. Truman Sports Complex that contains Arrowhead and Kauffman Stadiums

C. The area surrounding the Merriam Marketplace

D. Near several large employers along South Interstate 435

E. Near Stone Pillar Vineyard & Winery and several smaller businesses

F. Southern Johnson County surrounding Stilwell, Kansas

The large hot spot in the southern portion of the region is the result of one food truck location in Stilwell, Kansas that was visited nearly 30 times. Because there are very few other food truck locations in that area, the hotspot appears overwhelming compared to other hot spots in the region. Different interpolation techniques, including IDW, spline, and kriging, all produce this effect. Overall, the IDW method represented the data most accurately.
[Figure 4.4] Local Food Truck Activity

Food truck locations and frequencies in the study scope.

(Author, 2014)
**LOCAL ANALYSIS**

Based on the results of the regional analysis, the scope of the analysis within Kansas City, Missouri was narrowed. Rather than analyze the entire jurisdiction, the selected study area included the downtown core and stretched southeast to include the areas roughly within the Interstate 435 loop. Over 95 percent of the Kansas City, Missouri location points were contained within this scope.

The most frequented locations, shown in Figure 4.4, include:

1. Truman Medical Center on Hospital Hill (35 occurrences)
2. A vacant lot known by locals as “The Truck Stop” at the intersection of 21st and Wyandotte in the Crossroads Arts District (29 occurrences)
3. Sprint Center entertainment arena in the Power & Light District (22 occurrences)
4. The parking lot of a large business, Freightquote, in south Kansas City (17 occurrences)
5. The parking lot of a large government agency, the U.S. Federal Administration (14 occurrences)
6. Red Shed antique shop in the West Bottoms District (13 occurrences)
7. Intersection of 95th and Euclid in south Kansas City (11 occurrences)
8. Intersection of 18th and McGee in the Crossroads Arts District (11 occurrences)
9. The parking lot of a large business, Russell Stover, near the popular Country Club Plaza (10 occurrences)
10. Bella Patina antique shop in the West Bottoms District (10 occurrences)

Based on the information extracted via Twitter, many food truck vendors obtained permission to locate on private property. However, the second most popular vending location was a privately-owned vacant lot in the Crossroads Arts District known as “The Truck Stop.” Several food trucks located on the lot at the same time in order to benefit from their collective customer outreach.
[Figure 4.5] Local Heat Map
An interpolated heat map predicting food truck frequencies in the study scope. (Author, 2014)
Interpolation

Using the same inverse distance weighted (IDW) interpolation utilized for the regional analysis, the point data within the Kansas City, Missouri study area was examined. Once again, the predicted values were manually arranged into ten classes based on natural groupings in the data.

As seen in Figure 4.5, the most concentrated areas align with the most frequented locations. These areas included the downtown core, the Truman Sports Complex, near the Country Club Plaza (where vending is currently restricted), and in south Kansas City along Interstate 435. Although the downtown area is generally a popular vending location, a closer look reveals four distinct hot spots within the downtown area:

1. West Bottoms District (a historic area with a cluster of commercial and industrial uses)
2. Power & Light District (a popular entertainment area with several restaurants and nightlife establishments)
3. Crossroads Arts District (an enclave of boutique shops, creative businesses, studios, and art galleries)
4. Truman Medical Center on Hospital Hill
Moran's Index: 1.752949
z-score: 81.336349
p-value: 0.000000

**Result**

The p-value is not statistically significant. The z-score is insignificant.

**Interpretation**

Accept the null hypothesis. The distribution is the result of random spatial processes.

The p-value is statistically significant, and the z-score is negative.

Reject the null hypothesis. The spatial distribution is more spatially dispersed.

The p-value is statistically significant, and the z-score is positive.

Reject the null hypothesis. The spatial distribution is more spatially clustered.
Spatial Autocorrelation
Spatial autocorrelation was also calculated using Global Moran’s I, a tool to evaluate whether an expressed pattern is clustered, dispersed, or random. As an inferential statistic, the results of the analyses are interpreted within the context of a null hypothesis. For Global Moran’s I, the null hypothesis states that the attribute being analyzed is randomly distributed among the features in the study area (ESRI, 2013).

As shown in Figure 4.6, two outputs were returned by the pattern analysis. The z-score displays the standard deviations with the p-value as a probability. Both outputs are associated with the standard normal distribution curve. Very high or very low (negative) z-scores, associated with very small p-values, are found in the tails of the normal distribution curve (ESRI, 2013).

If a pattern analysis yields spatial statistics that fall within the tails of the normal distribution curve, it is likely that the observed spatial pattern reflects the theoretical random pattern represented by the null hypothesis. As a result, the pattern would either be classified as dispersed (if negative z-score values) or clustered (if positive z-score values).

Using the food truck location and frequency input, the spatial autocorrelation analysis produced a very high z-score of 81.34 and an extremely small p-value near 0.00. The p-value indicates that the results are statistically significant at the 0.01 confidence level.

Therefore, the positive z-score indicates that the spatial distribution of the food truck locations is spatially clustered. In other words, given the z-score of 81.34, there is a less than one percent likelihood that this clustered pattern was a result of random chance. The produced Moran’s Index of 1.75 also corroborates the results, as a positive index demonstrates a tendency towards clustering.

[Figure 4.6] Spatial Autocorrelation
The Global Moran’s I calculation determined that the food truck locations are spatially clustered at a high significance level. (ESRI, 2013)
[Figure 4.7]
Hot Spot Analysis

The z-score represented by standard deviations displays the intensity of spatial clustering.
(Author, 2014)
Hot Spot Analysis
While the Moran’s Index tests the data globally, the Getis-Ord Gi* tool identifies the extent and location of clustering. This tool was utilized to identify statistically significant spatial clusters of hot spots (high values) and cold spots (low values) within the Kansas City, Missouri study area. The tool assesses each feature within the context of neighboring features and compares the local situation to the global situation. As a result, a z-score is produced for each feature in the dataset.

Once again, this technique is based on the null hypothesis that the attributes are randomly distributed. However, because the analysis tests the data locally, the measures indicate whether to reject or accept the null hypothesis feature by feature. A z-score near zero indicates no apparent spatial clustering. The higher the z-score, the more intense the spatial clustering. Higher z-scores with positive values reveal intense clustering of high values (hot spots). In contrast, negative values indicate intense clustering of low values (cold spots) (ESRI, 2013).

The resulting hot spot analysis is graphically depicted in Figure 4.7. All points less than -2.58 standard deviations (dark blue) and greater than 2.58 standard deviations (dark red) have p-values that indicate statistical significance.

The area surrounding the downtown core and extending to the Crossroads Arts District possesses a significant cluster of high values. Therefore, it is an area that is used more frequently. Farther south possesses a significant cluster of lower values, or locations within the study scope that are generally used less frequently.
[Figure 4.8] Land Use
Land use within the study scope.
(Author, 2014)
CORRELATIONS
Through quantitative research, land use, demographic, and socio-economic data was obtained to examine possible spatial correlations with the food truck locations. The secondary data provided context for the remainder of the spatial analysis.

Land Use
Land use data was obtained from the Mid-America Regional Council, the metropolitan planning organization for the Kansas City region. Last updated in 2008, the data is classified into five major land use categories: residential, industrial, commercial and office, parks and open space, and mixed use (MARC, 2008). In most circumstances, the geocoded addresses pinpointed the food trucks to a street. Therefore, it is possible for one land use to be on one side of the street, and a different land use on the other. In order to account for this, the adjacent land uses for each food truck location were recorded.

After interpreting the data in this manner, it is clear in Figure 4.8 that food trucks primarily located near parks; 58 percent of all locations were adjacent to a park. Parks and open space appear to be a good fit for the atmosphere and options food trucks can provide. At 56 percent, commercial uses were a close second popular land use. In several cases, food trucks located on sites that were adjacent to both commercial areas and parks. In fact, nearly half of the food truck locations next to commercial uses were also next to parks. It is likely that the combination of land uses allows food trucks to cater to lunchtime office crowds while providing a nearby urban space for customers to enjoy their meal.

Although 37 percent of the food truck locations were adjacent to residential uses, very few locations appeared strictly in residential areas. Only 3 percent of the locations adjacent to residential uses were solely in residential areas. In these cases, the food trucks typically catered to planned church or neighborhood events.

In general, food trucks located in areas with multiple land uses. Within a one-quarter mile buffer of food truck locations:
- 97% were near residential uses
- 97% were near commercial uses
- 99% were near parks and open space
Employment concentration as number of jobs per square mile in the study scope. (Author, 2014)
Employment Concentration

Employment data from the Longitudinal Employment-Household Dynamics (LEHD) program was analyzed to determine correlations between food truck locations and employment concentration. The LEHD program is a sub-department of the Center for Economic Studies at the U.S. Census Bureau (U.S. Census Bureau, 2011).

The data reports the location and number of all jobs in Kansas City, Missouri in 2011, the most recent year for which data was available. The LEHD interface also produces a thermal image with the data organized into five distinct classes based on natural breaks in the distribution. Figure 4.9 represents employment concentration in the study scope as the number of jobs per square mile.

The intense clustering of food truck locations near the downtown core is significantly related to the heavy employment concentration in the area. In fact, 86 percent of the food truck locations within the study scope were in areas with greater employment concentration. Nearly 13 percent of all locations were within the area of heaviest concentration, the 0.75 square mile area in the downtown loop. Overall, there is a strong correlation between employment concentration and food truck locations. Food trucks likely serve lunch meals to employees in close proximity to their workplaces.

It was also noted during the Twitter data extraction that many food trucks mentioned the name of a business as their location rather than providing a specific address. Vendors could have advertised in this manner in order to make the location more recognizable to consumers. However, it is also a possibility that the vendor specifically partnered with this business in order to cater to their employees. This second hypothesis supports the notion that food trucks are attracted to clusters of daytime employment.
Walkability

Walkability within the study scope. A high walkscore is a walker’s paradise while a low walkscore is a car-dependent area. (Author, 2014)
Walkability

Data to replicate the concept of pedestrian-friendly areas, referred to as walkability, was accessed via Walk Score. Walk Score is a private company that produces a walkability index by assigning a numerical score to every address. The spectrum is defined as:

- 0 - 24: all errands require a car
- 25 - 49: most errands require a car
- 50 - 69: some errands on foot
- 70 - 89: most errands on foot
- 90 - 100: daily errands do not require a car

The Walk Score system quantifies walkability using a decay function to analyze walking routes to nearby amenities, population density, and road metrics such as block length and density. Some have critiqued the system’s accuracy because it does not incorporate certain aspects. For example, the system does not consider the existence of sidewalks, the number of traffic lanes a pedestrian must cross, how much crime occurs in the area, or walk “appeal.” However, despite its current limitations, Walk Score data is currently used by analysts in the fields of real estate, urban planning, public health, and government as the best source available for quantifying walkability (WalkScore, 2013).

Overall, Kansas City, Missouri has a walkscore of 32—meaning it is a car-dependent city where most errands require a car. However, some areas of the city possess a higher score, as shown in Figure 4.10. For example, the downtown core stretching south to the Country Club Plaza is the most walkable area within the study scope. This area also contained a majority of the food truck locations and is frequented quite often.

In fact, 75 percent of the locations were within moderate (yellow) or high (green) walkability areas, including the small pocket in southern Kansas City. A staggering 55 percent of the food truck locations were within the small portions of the study scope identified as highly walkable, thus obtaining a score of 70 to 100. Walkable areas are more enticing to pedestrians and therefore possess more pedestrian traffic—which provides more potential customers and activity for food trucks.
Figure 4.11
Restaurants
Food establishments, termed restaurants, in the study scope. (Author, 2014)
In fact, 23 percent of the food trucks were located in areas that do not have a restaurant within one-quarter mile of the vending spot. In these cases, vendors intentionally located away from restaurants to satisfy unmet demand unless near a major destination or attraction.

In contrast, a few places that were visited only once or twice by food trucks were in areas that already possessed a large number of dining options. For example, within one-quarter mile of these vending spots, there were:

D. Eighteen restaurants near West 75th & Wornall Road
E. Forty restaurants on Broadway Boulevard near the Country Club Plaza
F. Fifty-six restaurants near Westport Road in the Wesport Entertainment District

Currently, food trucks are prohibited from vending within fifty feet of a restaurant in Kansas City, Missouri. An analysis of food trucks related to this buffer will be explored along with other restrictions near the end of the chapter.
The Truck Stop in the Crossroads Arts District

[Figure 4.12]
Vacant Lots

Publicly-owned vacant lots in the study scope.
(Author, 2014)
Vacant Lots
Because of their mobility, food trucks have the potential to locate in urban areas that are underutilized. As a result, vacant lots have the opportunity to serve as interim hot spots of food truck activity.

To test this concept, the locations of publicly-owned vacant lots were obtained from the Land Bank of Kansas City. The Land Bank is a public organization that holds land for potential development in the future (Land Bank of Kansas City Missouri, 2013). Residential lots were excluded from the analysis, thus including only commercial and industrial vacant lots as of December 2013.

As seen in Figure 4.12, none of the food truck locations in Kansas City, Missouri were located on a publicly-owned vacant lot. Furthermore, only ten locations, approximately 4 percent of all points, were even located within one-quarter mile of a publicly-owned vacant lot. While food trucks may function as interim uses on underutilized and vacant lots, the data demonstrates that food trucks were not functioning in this manner, at least not on publicly-owned lots.

However, anecdotal evidence from the Twitter extraction revealed that several vendors located on a vacant lot known as “The Truck Stop” in the Crossroads Arts District. A closer look at this location reveals a gravel lot that is privately owned by 2100 Wyandotte Investors LLC. Therefore, while food trucks are not currently vending on publicly-owned vacant lots, food trucks take advantage of privately-owned lots. Unfortunately, it was difficult to obtain a database of all the privately-owned vacant lots in Kansas City, Missouri in order to provide more quantitative evidence. Nevertheless, the ability to vend on private and public vacant lots is one of the biggest opportunities for urban revitalization through food truck activity.
[Figure 4.13] Prohibited Areas

Prohibited restaurant buffers and streets in the study scope, as well as restricted parks. (Author, 2014)
Prohibited or Restricted Areas
The prohibited locations as identified by city ordinance include several streets and a few entertainment districts, as well as within fifty feet of storefront restaurants. Although not prohibited, public parks under the jurisdiction of the Parks and Recreation Department require an additional permit. Therefore, the parks are also illustrated as restricted areas on the map in Figure 4.13.

Interestingly, about 16 percent of the food truck locations were within a prohibited restaurant buffer, at least according to the addresses extracted via Twitter. However, it is unclear whether the food trucks were vending at a time when the restaurant was closed. It is also possible that the food truck was invited by the property owner to serve complementary items, which has been the case in a few instances. Another uncertainty relates to the type of food offered. While some food trucks located in the same areas as restaurants, it is unclear whether the trucks and nearby restaurants served similar types of cuisine.

Fourteen percent of the food truck locations were also listed on prohibited streets. However, it is possible that the vendor was parked off the street in a private parking lot at that particular address, which would not violate the ordinance.

Several food trucks also appeared in proximity to public parks, and it was unknown whether the trucks possessed the secondary permit to vend in parks [It was later determined in the study that none of the vendors have a park permit]. As these prohibited or restricted areas are popular vending spots, it is a disservice to the community to restrict vendors unless a legitimate public interest is at stake.
KEY FINDINGS AND STUDY IMPLICATIONS

Based on the results of the spatial analysis, a number of conclusions were identified in Kansas City, Missouri. Overall, the highest concentration of food truck activity is contained within the downtown core and adjacent districts, including the Crossroads Arts District, Hospital Hill, and the West Bottoms. Food trucks also frequent the same locations multiple times to establish a consistent customer base, collaborate with fellow vendors to attract collective attention, and partner with private property owners to vend on private parking lots.

Analyzing food truck locations in combination with secondary land use, demographic, and socio-economic data revealed important patterns and trends. The significant findings of each correlation analysis are summarized below.

Land Use

With 58 percent of the food truck locations adjacent to a park, parks and open spaces are a good fit for the atmosphere and options food trucks provide. These urban spaces may also possess various seating options, which would make dining more comfortable for customers. Commercial land uses were also popular food truck locations due to high “daytime populations.” Very few food truck locations were strictly within residential areas.

Employment Concentration

Food trucks locate near concentrations of employment to cater to lunch crowds. Related to the land use analysis, nearly half of the food truck locations were adjacent to commercial areas and parks. Therefore, the combination of high employment concentration and proximity to inviting spaces is appealing to food trucks.

Walkability

With 75 percent of the locations, food trucks tend to locate in moderately or highly walkable areas to draw attention from pedestrians. It is also likely that walkable areas accommodate all modes of transportation on a more equal footing. As a result, vehicles travel at lower speeds, creating a safer environment for food truck customers. Drivers may also be more aware of their surroundings when traveling at lower speeds, and thus more likely to
stop and order from a food truck. Walkable and pedestrian-friendly areas likely provide inviting spaces for eating outdoors as well.

**Restaurants**
Food truck vendors do not intentionally locate near storefront restaurants. In contrast, they prefer to vend near large businesses or temporary events where they can meet unsatisfied demand. They appear to stay away from areas that are already heavily-populated by a number of dining options.

**Vacant Lots**
Publicly-owned vacant lots are not currently utilized as vending locations. However, anecdotal evidence from the Twitter data extraction revealed that vendors collaborate with private owners to serve on privately-owned, underutilized lots. The ability to vend on private and public vacant lots is one of the biggest opportunities for urban revitalization through food truck activity.

**Prohibited Locations**
Fourteen percent of the food truck locations were found on prohibited streets, with slightly more found within a prohibited restaurant buffer. However, it is unclear as to whether the food trucks were located on an off-street parking lot at that location or had permission to be near a restaurant.

**Study Implications**
The spatial analysis provided data concerning food truck characteristics, which were relatively unquantified in the urban planning field. Specifically, the analysis provided analytical evidence of spatio-temporal food truck activities within Kansas City, Missouri.

The results furthered the understanding of food truck activities and informed the next phases in the methodology—interaction with stakeholders and the creation of a policy framework. Engaging stakeholders provides insight into the environment food trucks must operate within and conflicts that create barriers to food truck activity. Overcoming conflicts through appropriate policies will allow the food truck characteristics observed in the spatial analysis to increase, thus strengthening the ability of food trucks to activate urban spaces and produce the benefits outlined in the Background of the report.
OVERVIEW
The second phase of the methodology engaged two critical stakeholder groups—food truck vendors operating in Kansas City, Missouri and city staff involved in policymaking and enforcement.

Survey of Food Truck Vendors
A twenty-question electronic survey was distributed by e-mail to food truck vendors in the Kansas City Food Truck Association. Of the sixteen vendors included in the sample, only two were unresponsive. Three vendors opted not to participate and responded via e-mail with his or her rationale for the decision. Therefore, in total, the survey received eleven responses—nearly a 70 percent response rate. The complete survey response data is included in Appendix D.

City Staff Interviews
Phone interviews were initially conducted with city employees in the Health Department and the Business Customer Service Center (BizCare). Through contacts provided by the first two interviewees, phone interviews were then arranged with staff in the Police Department. A Public Works Department employee, also suggested via the two initial interviewees, was willing to respond via e-mail and answered a few questions in this manner. The Parks and Recreation Department was not willing to participate. Phone interviews lasted approximately 15 to 30 minutes depending on the interviewee’s expertise and ability to respond to conditional questions. Because the conversations occurred shortly after the vendor survey was completed, the interviews were able to answer questions when analyzing the survey results. The transcripts of the interviews are included in Appendix E.

Synthesis of Results
Rather than address the survey and interview results question by question, a synthesis of the data is presented. Based on the results, sixteen policy areas were identified and are described in the following section. Each policy area falls within one of three broad policy themes:
- Permitting and Enforcement
- Streets and Spaces
- Public Health and Safety

PERMITTING AND ENFORCEMENT
Permit Cost
According to the Health Department, the annual permit fee for a mobile food vendor is currently $218. While it is natural for any business owner to desire lower operating costs, over 70 percent of the surveyed vendors reported that they were either satisfied or held a neutral opinion towards the permit cost. Therefore, given the size of the jurisdiction, the cost is perceived as reasonable. It is also important to note that the mobile food vendor permit cost is slightly less than a small storefront restaurant, displaying that the permit fee structure was arranged in a logical manner.
Business License Renewal Process
Two vendors explicitly described difficulty with the business license renewal process. One vendor stated, "A two-week window (of only two days per week) makes it extremely difficult to renew your license in Kansas City, Missouri." The vendor recommended designating at least one month for business owners to renew permits, and perhaps consider giving priority to food trucks that have previously met all conditions. Another vendor criticized the lengthy and time-consuming process to simply obtain a business license "sticker" each year. The individual did convey that a recently introduced online renewal option will greatly expedite the process in the future, making it easier to keep their business running year after year.

Information and Support
In many cities, it is common for a business owner to interact with several city departments before meeting the requirements to legally operate. The process for food truck vendors in Kansas City, Missouri is no exception. In addition to finding the appropriate ordinances, a food truck vendor interacts with multiple departments, including:

- The Finance Department to obtain business licenses, tax information, and other clearances
- The Health Department for vending permits and to pass inspections
- The City Planning and Development department for temporary use permits
- The Public Works Department to obtain festival permits

Although available on the city’s website, which was updated in March 2014 and shown in Figure 5.1, much of the relevant information is in several different places due to the multiple departments involved. Over 50 percent of the surveyed food truck vendors expressed difficulty finding the permitting processes and regulations for food trucks. Even if they could find the information, vendors cited even greater difficulty understanding the processes.

According to the Business Customer Service Center (BizCare), the department’s role is to educate. The BizCare interviewee stated, “Ideally, they will call us when they’re just thinking about it [starting a food truck]. We’d rather see people check-in while they’re still in the research phase.” Based on the interview discussions, staff in all of the departments can assist vendors in comprehending the regulations and processes. However, the disconnect is the lack of awareness that these resources are available to food trucks. A surveyed vendor echoed this sentiment, sharing, “It is very complicated to start a business because no one tells you what exact items have to be in place, or the order those things have to be done (which matters!).”

Unlicensed Vendors and Enforcement
All of the surveyed food truck vendors agreed (36%) or strongly agreed (64%)
that licensing is a good business practice. In addition, all of the vendors expressed that unlicensed vendors give the food truck industry a bad reputation, and a majority (91%) would be willing to report an unlicensed vendor. As a result, unlicensed vendors are not currently a major issue in the city. Interviewees from BizCare and the Department of Health both expressed that, “It [unlicensed vendors] doesn’t come up very often.”

From the Police Department’s perspective at the street-level, the interviewee shared, “When these guys [vendors] have ongoing feuds with each other, they will absolutely rat each other out for not being properly licensed.” Because of economic competition, vendors are willing to report unlicensed food trucks, thus creating a natural form of enforcement.

In Kansas City, Missouri, the Police Department is charged with enforcing the non-health related aspects of the code of ordinances, which can involve permit requirements and location restrictions. However, according to the Police
Department, most law enforcement has very little interaction with food trucks. The primary reason an officer would be involved is to resolve disturbances that arise because of food trucks, typically in the entertainment districts where vendors tend to cluster. For example, the interviewee shared that most of the disturbances near the Power & Light District are between vendors competing for prime locations. The other equally frequent disturbance involves a business that does not want a food truck near its property. Other than these two primary disturbances, the Police Department “doesn’t have the resources, nor do they go out of their way to ensure compliance.” In addition, the interviewee noticed a distinction between a “hot-dog cart” versus a “high-end” food truck. In general, a majority of the disturbances did not involve food trucks but more so the “low-end” vendors and pushcarts.

STREETS AND SPACES

Restaurant Buffers
While food trucks generally have a positive relationship with commissaries, other vendors, customers, and the general public, their relationship with storefront businesses is strained. However, the vendors’ opinion towards the 50-foot restaurant buffer in Kansas City, Missouri varies significantly. While three of the eleven vendors strongly agreed that the buffer is a reasonable distance (27%), five vendors disagreed (45%). In areas with a cluster of restaurants, the buffer may be particularly restrictive. The Police Department’s experience with conflicts, especially near popular areas such as the Power & Light District and Westport entertainment area, corroborates this sentiment.

Therefore, in most areas of the city, the 50-foot buffer is not particularly restrictive. However, certain concentrated destinations in Kansas City, Missouri pose issues. These specific cases are addressed in the District Restrictions section as a separate clause of the ordinance pertains to these areas.

School Buffers
The Kansas City, Missouri ordinance prohibits food trucks from vending within one block of schools roughly during school hours. Fifty percent of the vendors surveyed were interested in vending at

[Figure 5.1] City Website
Kansas City, Missouri launched a new website format in March 2014. Business and permit information, including the new permit renewal procedure, is available on the site. (Kansas City Missouri, 2014)
these locations, particularly near college campuses such as the University of Missouri-Kansas City (UMKC). According to BizCare, the school buffer is applicable to any type of school, including the several colleges and universities in the jurisdiction: UMKC, Kansas City Art Institute, Rockhurst University, Avila University, and the Metropolitan Community College. In order for food trucks to vend within a one-block radius of these institutions, vendors would need to secure permission from the university and obtain a temporary use permit for each separate vending event.

**Park Restrictions**
The Parks and Recreation Department has sole authority to permit vending in city parks. Although vending is not directly prohibited in parks, food trucks must obtain a secondary $500 permit each year. In addition, the secondary permit only authorizes vending in one park. As a result, vendors are required to obtain multiple permits to vend in multiple parks.

A unique clause in the *Parks and Recreation Vending Policy* provides incentives for food trucks who meet healthy vending thresholds established by the department. For example, “healthier” vendors receive a 50 percent reduction in the cost of the permit. “Healthiest” vendors receive a “roaming” permit that allows vending in three parks with the purchase of just one permit. The policy also allows the department to limit the number of permits issued each year. In addition, the Parks and Recreation Department can revoke vending permission when special events occur in the parks, an issue since 90 percent of vendors expressed that proximity to special or temporary events is very important (20%) or extremely important (70%).

Interestingly, none of the eleven vendors reported possessing a secondary park vending permit. In the comment section of the survey, two individuals expressed that food trucks do not make enough profit to pay for expensive secondary permits, and one vendor was not even aware of the policy. Although vending near parks and open space was the most frequented vending land use in the spatial analysis, two vendors also shared that vending in parks is not necessary and that they simply “don’t go there.”

Although contacting the Parks and Recreation Department for an interview was difficult, the department expressed the intention behind the policy was to increase access to healthier food and beverage alternatives in the parks. As a result, food truck vending in parks is not directly prohibited, but the high permit cost and other restrictions discourage legal food truck activity in Kansas City parks. On a related note, 80 percent of the vendors expressed interest in receiving incentives for serving food that meets specific health guidelines—similar to those utilized by the Parks and Recreation Department.
Street Restrictions
Vending is prohibited on streets in Kansas City, Missouri designated as trafficways, boulevards, or parkways. According to BizCare, the parkways and boulevards are protected from vending for aesthetic reasons, and trafficways are restricted due to traffic concerns.

Understanding the reasoning for this clause requires a bit of background regarding the development of Kansas City, Missouri. In the late nineteenth century, Kansas City was a growing town with only few paved streets and sidewalks. As the city developed, a group of citizens influenced by the City Beautiful movement saw a need for creating a better quality of life and improving the city’s appearance. The concept led to the creation of a boulevard and park system master plan, created in 1893 by renowned landscape architect George Kessler. As a result, the boulevards and parkways are viewed as historic, scenic byways.

While trafficways are typically not preferred vending areas due to their lack of pedestrian friendly amenities and foot traffic, the restriction on parkways and boulevards poses concerns. Key nodes along specific byways would be preferred vending locations. The BizCare interviewee mentioned a similar observation as well, sharing, “You know the reason you don’t see food trucks around Crown Center is because Grand is a boulevard. And Pershing Road at one point is a boulevard.”

Examples of key nodes include:
- Broadway Boulevard near the Convention Center and concentrations of downtown employment
- Grand Boulevard near the Power & Light District
- Grand and Pershing Boulevards near Crown Center
- Brookside, Emanuel Cleaver II, Volker, Ward, and Warwick Boulevards near the Country Club Plaza

These areas possess many of the qualities that vendors reported as important when considering locations: high pedestrian traffic, high concentration of employment, proximity to shopping districts, and proximity to special or temporary events.

District Restrictions
Multiple clauses in the vending ordinance dictate prohibited areas within the jurisdiction. The clauses describe these areas in terms of the “centerline of road A to the centerline of road B,” and so on. After interpreting the descriptions, the prohibited areas roughly amount to the following districts:
- Downtown Convention Center
- Power & Light District
- Country Club Plaza
- Truman Sports Complex

Based on the interviews, the district restrictions are the biggest source of complaints among food truck vendors. The Police Department interviewee revealed
the rationale behind these “exclusion zones.” The officer used the Power & Light District as an example to explain, “There’s a developer agreement because the city agreed to a mortgage, such as with Power & Light. The developer agreement actually allows the district to control the vending on the sidewalks. And the reason for these exclusion zones is because Kansas City taxpayers subsidize the shortfalls in the Power & Light District. If they don’t make “x” amount of dollars every year, then it comes out of the city coffers to pick that up. So, it’s in everybody’s interest if food truck vendors aren’t there.” The officer also conveyed that the exclusion zones were the most significant piece of legislation that he could recall in the past twenty years.

In the fall of 2013, the Chiefs organization, the National Football League team that plays at Arrowhead Stadium in the Truman Sports Complex, experimented with inviting food trucks onto the property. Based on the spatial analysis, the invitation was quickly embraced by a few food truck vendors. While the intention was to enhance the fan experience at football games, the BizCare interviewee expressed, “I’m not sure if they [the Chiefs organization] felt that this experiment was successful.” The interviewee was unaware if the organization plans to invite food trucks back into the Truman Sports Complex in the future.

As with the street restrictions, these four prohibited entertainment districts possess the same location qualities that are critical to fostering food truck activity. Overwhelmingly, 90 percent of the surveyed vendors indicated interest in vending near the Convention Center and 80 percent near the Country Club Plaza.

**Time Limits**

Kansas City, Missouri does not currently specify operating hours for food trucks, but vendors must follow all the public parking regulations applicable to vehicles. For example, if a downtown parking space has a time limit of one hour, vendors are required to find a new location once the time expires. As a result, public parking is another issue related to food truck activity in Kansas City, Missouri. In the downtown area, the majority of the public parking spaces are subject to two-hour limits. However, according to the survey results, two hours is typically considered the minimum time needed for a vendor to make a profit at one location.

The Police Department generally turns a blind eye to public parking, particularly after enforcement hours, for any car in the downtown area. However, officers will step in when a disturbance arises. For example, the interviewee shared, “Most of the food trucks I’ve dealt with in the evenings—it’s when somebody didn’t feed the meter. And another food truck vendor will complain because they want that spot. Probably
some of them are parked illegally, but again, we don’t go out of our way to hassle these guys.”

Enforcement officers have noted that the competition over public parking has increased over the years as vendors vie for the prime spot. According to the interviewee, the competition has “even gotten to the point of [vendors] staying there overnight to get a spot. There’s a guy sometimes in a sleeping bag in a trailer!”

The Public Works Department has also discussed allowing food truck vendors to obtain permits to reserve parking spaces for longer periods of time. At this point, the department does not have a mechanism for facilitating the idea. The department’s view towards public parking, particularly in the downtown area, is that “The parking meter parking is there for business patrons. That’s how their customers get access to them and then they move on. So if we say, you can issue a temporary permit for four hours for a food truck, then that’s conflicting the availability of parking.” The Public Works Department believes the principle purpose of public streets is to facilitate circulation—that “it is not their mandate to provide a place to do business.”

Another approach to public parking is to seek a festival permit to reserve a street for food truck activity, such as the case in Figure 5.2. The Public Works Department is responsible for granting festival permits; however, issuing the permit requires permission from all the property owners on the affected street. The BizCare interviewee described an alternative approach to a festival permit witnessed last summer. The individual explained, “We saw a couple folks who owned a lot of property on Walnut between 12th and 11th work out an arrangement to get a temporary use permit for a parking lot. They wanted to have a mini food truck festival. They, because it was the owners who saw some value in having food trucks there on a nice summer day to get folks out of their offices, put something on. They actually sponsored this event on private property.” Otherwise, the only option is to find a legal parking space and just follow the rules.

**Vending on Private Property**

Although the ordinance states that vendors must obtain all required permits and certificates to vend on private property, it is not explicitly clear as to which permits are required. According to BizCare, the specific process to vend on private property refers to obtaining a temporary use permit. The temporary use permits granted by the City Planning and Development Department allow for temporary events on private parking lots after securing authorization from the private property owner.

Permits for one-time events are relatively easy to obtain and granted within a week’s time, but recurring event permits require
Half of the surveyed vendors expressed that it can be difficult to obtain permission to vend on private property. However, all of the vendors agreed (10%) or strongly agreed (90%) that they are more successful working with private property owners than attempting to find public parking spots.

Vending on Vacant Lots
To vend on privately-owned vacant lots, food trucks must follow the same temporary use permit procedure required for private property. However, the food truck vendors’ opinion towards vending...
on vacant lots is very positive. All of the surveyed vendors agreed (30%) or strongly agreed (70%) that they do not mind vending on vacant or empty lots as long as the customer demand is present.

In particular, the Police Department interviewee noted the success of the food truck events located on empty and vacant lots in the Crossroads Arts District. The individual shared, “The biggest problem you have, honestly, with the food truck industry is it’s a mobile thing that has to set up some place. And there’s no place to set them up necessarily. The First Friday down in the Crossroads—they have a parking lot over by the Kansas City Star—and they all park over there. It’s widely popular. I mean, huge lines! It’s very successful when they plan for food trucks.”

While vending on privately-owned vacant lots is allowed after securing the appropriate permits, there currently is not a mechanism in place to vend on publicly-owned vacant lots. A few institutions, such as the Lank Bank of Kansas City, hold multiple vacant or underdeveloped properties in commercial areas that may be suitable for interim uses like food truck activities. All of the surveyed vendors overwhelmingly indicated interest in vending on publicly-owned vacant lots in the future.

PUBLIC HEALTH AND SAFETY Certification Requirements
One myth and concern related to food truck vending is that anyone can start a food truck business, and therefore the risk of improper food handling is high. However, this is not true—only individuals with the proper certification can start a food truck business. The Health Department explicitly requires a certified food handler to be present in the food service area at all times. The Health Department offers training courses monthly, both in-person and online, for individuals to obtain the certification. All of the surveyed food truck vendors (100%) agreed that operators should have the proper training and certification to ensure public health and safety.

Trash and Cleanliness
According to the Health Department, food truck vendors are required to have a trash receptacle for customer use. The

[Figure 5.2] Food Truck Festival
A festival permit allowed property owners and food trucks to close the street for a food truck event in Kansas City, Missouri. Interestingly, the event was also held on a boulevard, specifically Grand Boulevard. (KCFoodTrucks, 2013c)
vendor survey revealed that not only did 100 percent of the vendors meet the requirement, but 40% provided a hand-washing station or sanitizer dispenser for customer use as well. Nearly all of the vendors also expressed that the cleanliness of the vending location is very important (40%) or extremely important (50%). In general, the results display the concern for urban spaces as well as concern for customer health. Additionally, neither the Health Department nor BizCare described littering to be an issue at the current time.

Type and Frequency of Inspections
Currently, food trucks are required to pass one scheduled health inspection each year in order to renew their vending permit. However, if a complaint is raised against the vendor, the Health Department will inspect the unit to ensure compliance. Sixty percent of the vendors preferred the current scheduled health inspections as opposed to “surprise” field inspections or a combination of both. Once again, a majority of the vendors (56%) had no complaints with the frequency being once per year.

On the other hand, one-third (33%) of those surveyed were interested in having inspections similar to the manner in which restaurants are inspected. In Kansas City, Missouri, restaurants are subject to inspections based on a risk assessment. According to the Health Department, “The restaurants are divided into four categories—low, medium, moderate, and high risk. [They] do inspections at low risk at least once per year, twice for medium, three for moderate, and four for higher risk.” Food trucks are not currently inspected based on this structure. However, vendors echoed the desire to be treated the same as restaurants with all of those surveyed agreeing (50%) or strongly agreeing (50%) that food trucks should be subject to the same health codes as restaurants.

Consistency of Enforcement
The consistency of enforcement, particularly related to health codes, was one of the complaints mentioned by food truck vendors in the open-ended survey questions. For example, one vendor claimed, “I can’t get licensed to vend in Kansas City, Missouri based on current regulations and interpretation of the code by each inspector. We have had multiple instances of enforcement changes based on personal code enforcement officer opinions.” Another vendor reiterated the sentiment, sharing, “In Kansas City, Missouri, the regulations allow for individual inspectors to make up rules as they go along. This allows for uneven application of the rules. Inconsistent application of the rules makes for unfair competition and costs. Arbitrary rules make it extremely difficult for new trucks to meet the laws.”

Based on the interview with the Health Department, staff believes that the chance for something to go wrong is higher for
food trucks than for restaurants. Although the number of citations food trucks receive is similar to the number of citations among restaurants, the Health Department generally has “less tolerance for such violations” with food trucks.

**KEY FINDINGS AND STUDY IMPLICATIONS**

Based on the results in this phase of the methodology, some of the current policy areas are considered reasonable and do not require major revisions. In contrast, other policy areas are in need of improvement. The significant findings of the policy areas that require improvement are summarized below.

**Information and Support**

Although the city provides some informational publications and staff can assist business owners, there is a lack of awareness among food truck vendors that resources are available. As a result, food truck vendors have difficulty understanding and interpreting policies and regulations.

**School Buffers**

The current policy prohibits food trucks from locating on or near university campuses, which are desirable food truck locations due to their concentration of “daytime populations.”

**Park Restrictions**

The high cost of the secondary park permit deters vendors from obtaining the permit.

**Street Restrictions**

Streets classified as boulevards or parkways are prohibited vending locations due to aesthetic concerns. The prohibitions impact popular vending spaces downtown, near Crown Center, and near the Country Club Plaza.

**District Restrictions**

Developer agreements in four districts create vending exclusion zones. The exclusion zones are the biggest source of complaints among food truck vendors.

**Time Limits**

Competition for public parking, particularly in key nodes and during temporary events, is a concern among food truck vendors. However, the city believes the purpose of public streets is to facilitate circulation, not to provide a place to do business.

**Vending on Private Property**

The ability for food trucks to locate on private property provides a critical vending alternative in contrast to public parking. However, food trucks are required to obtain a temporary use permit each time they wish to vend on private property, even after they obtain permission from the property owner.

**Vending on Vacant Lots**

Food trucks are overwhelming willing to
Permitting and Enforcement

- Permit Cost
- Business License Renewal Process
- Information and Support
- Unlicensed Vendors and Enforcement

Streets and Spaces

- Street Restrictions
- District Restrictions
- Time Limits
- Vending on Private Property
- Vending on Vacant Lots

Public Health and Safety

- Certification Requirements
- Trash and Cleanliness
- Type and Frequency of Inspections
- Consistency of Enforcement
locate on vacant lots if the demand is present and often serve on privately-owned vacant lots. Although there is interest among food trucks in vending on publicly-owned vacant lots, there is currently no structure to facilitate the process.

Consistency of Enforcement
While vendors agree that inspections are necessary to protect public health, there is concern about the consistency of enforcement. The city also tends to have less tolerance for violations with food trucks as compared to restaurants.

Study Implications
As the primary method, the qualitative, web-based survey of food truck vendors identified issues from the vendor perspective. On the other end of the spectrum, the interviews with city employees expanded the understanding of the current policy structure and the rationale behind regulatory decisions.

Based on the synthesized data, sixteen policy areas were identified, which also provided a structure for the food truck policy framework in the following phase. While all sixteen areas are included in the framework, the data highlighted the need to address specific issues in nine of the policy areas. These areas remained the focus in the policy framework. A summary of the policy areas, with an emphasis on the areas that are in need of improvement, are illustrated in Figure 5.3.

[Figure 5.3] Policy Areas
A diagram summarizing the policy areas included in the policy framework. The nine areas particularly in need of improvement in Kansas City, Missouri are listed in bold. (Author, 2014)
OVERVIEW
The final phase of the methodology involved the creation of food truck policy guidelines to address the conflicts identified in Chapter 5 in order to strengthen the characteristics observed in Chapter 4. However, before drafting recommendations, policies in four key cities were reviewed in order to examine policy approaches used by other cities to address similar conflicts. These cities:

- have a history of interacting with the food truck industry
- have been listed as “Best Food Truck Cities” by sources
- recently updated their regulations

The policy review was not intended to be used for comparison purposes, but to explore example policy approaches. Then, based on the comprehensive understanding gained through the methodology, a policy framework was created with guidelines for each policy area. While each policy area is presented, a greater focus was placed on the nine areas in need of improvement in Kansas City, Missouri.

POLICY REVIEW
Although the policies were researched by city, the information is presented by policy area to easily convey approaches. The information was primarily obtained from each city’s Code of Ordinances. However, because the cities recently updated their regulations, some secondary material concerning the former policy or reasoning behind the recent changes was available. For example, Kansas City, Missouri’s food truck policy was last updated in 2006. As a result, the policies pre-date the boom of the food truck industry in the region. In contrast, the four selected cities updated their policies after noting the need for revision due to increasing food truck activity:

- Washington D.C. in October 2013
- Chicago, Illinois in July 2012
- Austin, Texas in October 2010
- Portland, Oregon in June 2009

Significant aspects of the regulations in each of the sixteen policy areas are summarized in Tables F.1 through F.16 in Appendix F. In the tables, “None” indicates that information related to the policy area was not readily available online. At times, even policy areas in Kansas City, Missouri are listed as “None” because the material was not present online; rather, the information was only understood due to clarification through the city staff interviews.

Key Findings and Study Implications
Based on the policy review, a summary of the approaches that pertain to the sixteen policy areas are summarized below. An asterisk highlights the areas in need of improvement in Kansas City, Missouri.

Permitting and Enforcement
Permit Cost
Kansas City, Missouri’s permit cost is very similar to the fee collected by Austin, Texas, which has a similar cost-of-living and size.
Business License Renewal Process
The cities provide at least a 45-day period for license renewals. This is particularly important as some cities limit the dates and times renewals are processed.

Information and Support*
The cities provide webpages and multi-page, comprehensive publications dedicated to food truck information. They also make it explicitly clear if staff is available to serve as a resource or point of contact regarding questions.

Unlicensed Vendors and Enforcement
Kansas City, Missouri’s penalties are the same as those in Portland. Washington D.C. revokes permits for repeat offenders who have committed the same violation six or more times in a twelve month period.

Streets and Spaces
Restaurant Buffers
Restaurant buffers range from 20 to 200 feet. Washington D.C. recently removed a 500-foot buffer in exchange for a more reasonable 200-foot buffer.

School Buffers*
Some cities limit vending near primary and secondary schools, but universities can grant permission at their own discretion.

Park Restrictions*
The cities utilize an array of approaches, ranging from single-day permits to variable-cost monthly permits.

Street Restrictions*
Unlike Kansas City, Missouri, the cities have relatively no regulations that pertain to specific classifications of streets. Some streets are restricted due to traffic concerns.

District Restrictions*
Cities tend to permit vending in all commercial zones or approve designated vending zones.

Time Limits*
The cities generally allow food trucks to operate late into the night or early morning. The cities allow food trucks to locate in one place for at least two hours or more.

Vending on Private Property*
In the reviewed cities, vendors must obtain permission from the property owner or lessee to vend on private property. Vendors are not required to obtain secondary temporary use permits from the city.

Vending on Vacant Lots*
Generally, the cities encourage food trucks on vacant lots as interim uses. Portland is evaluating publicly-owned vacant lots that can be leased to food trucks.

Public Health and Safety
Certification Requirements
All four cities require some form of Food Protection Manager and/or Food Handler certification. Portland provides online and in-person training sessions, while Chicago requires vendors to also complete an
appointment with a Business Consultant to review best practices.

**Permitting and Enforcement**

**Permit Cost**

**Guideline:** Establish a reasonable permit fee given the size of the jurisdiction.

**Reasoning:** Even with vendors possessing a bias towards fees, the survey results indicated that 70 percent of the vendors found the permit cost to be reasonable. In addition, while the interview results discussed a number of vendor complaints, but issues with the permit cost was not among them. The cities in the policy review also possess permit costs that have a nexus between the size of the city and the number of vending opportunities available in the jurisdiction.

**Implication on Urban Spaces:** Because of their mobile nature, food trucks are constantly paying for permits and inspection fees in multiple jurisdictions. As a result, food trucks must be able to generate enough revenue to justify obtaining a permit in the jurisdiction. Reasonable permit fees encourage food truck activity while excessive costs will force trucks to either vend illegally or operate within a different jurisdiction entirely.

**Business License Renewal Process**

**Guideline:** Allow at least thirty days to renew business licenses. If renewals are only offered on specific days or times, allow for a longer renewal period. Utilize an online renewal process with an automated e-mail reminder to improve efficiency.

**Trash and Cleanliness**

All four cities require a trash receptacle to be provided. In addition, Washington D.C. and Portland require vendors to keep adjacent spaces clear of litter.

**Types and Frequencies of Inspections**

Austin and Portland perform annual inspections, while Washington D.C. inspects food trucks every six months. Inspections occur at a designated location—most likely the commissary facility.

**Consistency of Enforcement**

Austin has staff designated to perform food truck inspections to ensure consistency. In Portland, vendors cease operation if a violation is found during the inspection, but are given a 14-day period to correct the issue before permits are withdrawn.

**POLICY FRAMEWORK**

Each policy area contains a guideline, the rationale supporting the guideline, and the implication it has on urban spaces. The rationale used findings from all phases of the methodology to develop the guideline. A greater emphasis is placed on policy areas that were identified as areas in need of improvement in Kansas City, Missouri. These areas are again denoted with an asterisk. Then, a matrix presenting the overall policy framework is presented at the end of the chapter in Table 6.1.
Reasoning: The survey results revealed that vendors had difficulty renewing business licenses due to the small window of time allotted. However, the survey and interview results both indicated that a new online renewal process had been implemented in the past few months to simplify the process. The cities examined in the policy review also provide at least a 45-day renewal window, which is important in Austin as renewals are only available on Tuesday and Thursday mornings.

Implications on Urban Spaces: Narrow renewal windows negatively impact ongoing business obligations. Difficult renewal processes may also incite vendors to operate “under the radar” while they wait for proper licenses. Proper renewals ensure that food trucks are registered to remit sales tax, which provides investment capital for urban spaces in the city.

Information and Support*

Guideline: Create explicit and easy-to-find resources, including information guidebooks and staff appointments. Develop a comprehensive step-by-step checklist to direct vendors through the multi-department processes and regulations.

Reasoning: With the need to interact with multiple departments, the survey results indicated that over half of the vendors had difficulty not only finding the food truck regulations but understanding them as well. The interview results displayed that city staff would prefer to meet with vendors while they are still in the research phase; however, there is a lack of awareness that resources are available, particularly due to a lack of communication between departments. Cities examined in the policy review have created in-depth guidebooks and checklists specifically tailored to food establishments. The guidebooks and resources are easy to find on the city websites and do not require excessive navigating through department pages. In Chicago, the city explicitly recommends that food truck vendors meet with a Business Consultant before initiating the process. Portland even has an entire city webpage dedicated to food trucks and carts.

Implications on Urban Spaces: Difficulty navigating the permitting and regulatory structure can be a major obstacle to food truck start-ups, operation, and growth. Misunderstanding the information can lead to future violations, strained business relationships, and enforcement that may appear uneven. Customer service and proactive communication to assist with the comprehension of policies can ease major conflicts, thus allowing food trucks to legally operate within urban spaces.

Unlicensed Vendors and Enforcement

Guideline: Avoid restricting the number of food truck permits issued.

Reasoning: The survey results indicated that all of the vendors agreed that licensing
is a good business practice, and most would be willing to report an unlicensed vendor. Due to this natural enforcement, unlicensed vendors are not currently a major issue in the city. The interview results also described fewer problems with food truck as compared to low-end pushcarts, but nonetheless noted the enforcement motivated by competition among vendors. The violations in Kansas City, Missouri are on par with cities examined in the policy review, and none of the examined cities limit the number of permits issued.

Implications on Urban Spaces: Nearly 50 percent of the surveyed vendors expressed that one of the biggest myths related to food trucks is that they are unsanitary. Without health inspections, unlicensed vendors pose a threat to consumers and add to the view that food trucks are unsanitary. Denouncing the myth by ensuring proper licensing and gaining the trust of consumers is critical to establishing customer confidence in food truck activity.

**Streets and Spaces**

**Restaurant Buffers**

**Guideline:** Establish restaurant buffers of no more than fifty feet in order to provide reasonable access and visibility to storefront restaurants. Provide vending zones in areas where clusters of restaurant buffers impede food truck activity.

**Reasoning:** In the survey, the vendors’ opinion toward restaurant buffers varied greatly with some despising them and others indicating that the 50-foot buffer is not extreme enough to cause major issues. Nevertheless, the interview results displayed that conflicts between food trucks and restaurant owners are one of the issues perceived. As such, a reasonable restaurant buffer respects storefront businesses without being overly restrictive on food truck activity. Cities examined in the policy review have buffers ranging from 20 to 200 feet. However, Washington D.C. recently took measures to remove the former 500-foot buffer and replaced it with a less restrictive 200-foot buffer. Chicago’s 200-foot buffer, because it is overly restrictive downtown near clusters of restaurants, is also a current litigation target. To meet the interests of all stakeholders, the guideline recommends a buffer of no more than fifty feet, which currently works well in Kansas City.

Implication on Urban Spaces: Restrictive buffers that protect one type of business over another result in unconstitutional economic protectionism. However, in general, food trucks tend to locate away from restaurants in order to satisfy unmet demand. For example, the spatial analysis displayed that 23 percent of the food truck locations were more than one-quarter mile away from a restaurant. Yet, about 16 percent of the food truck locations were within a prohibited 50-foot restaurant buffer. In these cases, food trucks were located in key destination nodes such as near the
Implication on Urban Spaces: Primary and secondary school buffers ensure the safety of children, especially as vehicles navigate to pick-up and drop-off students. However, the food truck experience is particularly desired by young adults on university campuses. Campuses also supply a significant “daytime population” similar to commercial areas. As evidenced by the spatial analysis, food trucks prefer to concentrate near “daytime populations,” thus making university campuses a highly desired food truck location. Food truck activity can stimulate social interaction by drawing customers from campus as well as surrounding blocks.

**School Buffers**

*Guideline:* Create one-block buffers around primary and secondary schools when school is in session, including the 30-minute period preceding school and the 30-minute period after adjournment. Collaborate with universities to grant permission for food trucks to vend on or near campuses.

*Reasoning:* According to the survey results, schools are generally not important vending locations. However, some individuals expressed interest in serving on or near university campuses, which is currently prohibited by the regulation as it covers all schools. However, the interview results conveyed that vendors could still secure permission directly from a university, although it is not explicitly clear in the regulation. Based on the policy review, other cities have similar school buffers, but they do not apply to university campuses as most have distinct authorization processes.

**Park Restrictions**

*Guideline:* Establish a vending structure that designates parks into multiple categories with the permit fees differing for each category. Provide temporary passes that allow vendors to serve at special events. Communicate park regulations to other departments or include regulations in a comprehensive publication in order to increase awareness of the policy.

*Reasoning:* According to the survey results, none of the vendors obtained the park permit, often because the permit is expensive or they were unaware of the policy. Although the vendors were relatively indifferent towards vending in parks, the spatial analysis displays that parks were the most popular land use. A closer look at the spatial analysis reveals that food trucks

Power & Light District. As a result, providing vending zones in key destinations where clusters of restaurant buffers are overly restrictive allows food trucks to activate spaces within these districts. Based on the hot spot analysis and clustering of restaurants, possible candidates for designated vending zones include areas near the Power & Light District, the Crossroads Arts District, and the Country Club Plaza.
locate on the fringes of parks, suggesting that the park may not be the primary reason behind the vending location. For example, in several cases, food trucks were adjacent to both commercial areas and parks, displaying that the concentration of employment is likely the draw. However, nearly all of the vendors stated that serving at special or temporary events, which are often hosted in parks, is important. As such, providing a mechanism for vendors to serve at park events is critical. While the interview results reveal that the intention behind the current, expensive permit fee is to motivate vendors to provide healthier food options, the policy is still too restrictive or simply unknown to vendors. Based on the policy review, Portland utilizes a variable-cost park permit structure that classifies parks into three categories. A similar structure in Kansas City, Missouri would give food trucks more pricing and location options. Austin also provides temporary, single-day permits that allows food trucks to serve at special events.

Implication on Urban Spaces: As evident by the spatial analysis, parks are the most heavily utilized land use, likely because parks complement food truck activity by providing inviting spaces for customers to interact. Vendors also provide trash receptacles and care for the spaces they occupy, thus leaving no significant detrimental effect on park spaces. Food trucks serve as a means to use the private sector to encourage increased activity in parks, particularly areas that may be underutilized. As such, the park categories and permit fees could be tied to areas where the Parks and Recreation Department would like to increase social and physical activity. Usually, parks do not provide a consistent consumer base for permanent establishments to serve visitors. However, when parks host temporary or special events, food trucks can easily meet short-term demand. Therefore, allowing temporary park passes allows food trucks to cater to these events.

Street Restrictions*

Guideline: Restrict vending locations on specific streets only when a nexus related to traffic concerns and public safety is clearly evident. Create an up-to-date visual map of restricted locations to assist with the comprehension of regulations.

Reasoning: The survey results revealed vendors’ desires to locate on several of the restricted boulevards and parkways, likely because they are in close proximity to concentrations of employment, special or temporary events, and pedestrian traffic. However, the interview results suggest that vending is currently restricted on these streets for aesthetic reasons. On the other hand, recent studies explored in the literature concluded that 94 percent of survey respondents in Portland had a positive perception of food trucks and the vehicle’s appearance did not affect the public’s opinion of the food truck. A
San Francisco study also discovered that individuals were less cognitively aware of the environmental attributes of the place and more connected to the social experience provided by food trucks within the space. Therefore, aesthetic concerns should not be a primary reason for vending restrictions. In Kansas City, Missouri, the notion of boulevards also has a historic, aesthetic sentiment that is not as evident today. For example, besides the name, there is very little distinction between the “scenic” Grand Boulevard and the “non-scenic” Main Street a few blocks to the east. In addition, no other cities in the policy review have restricted streets or locations for purely aesthetic reasons.

Implication on Urban Spaces: Rather than detract from the aesthetics of a place, food truck activity allows people to enjoy the unique assets of a city and create place-based connections to a space. In addition, 14 percent of the food truck locations in the study frame were on restricted streets, particularly Grand Boulevard. Therefore, the spatial analysis reveals the desire to cater to these urban spaces.

**District Restrictions***

**Guideline:** Provide designated vending zones near exclusion zones that result from developer agreements.

**Reasoning:** The survey results indicated a strong desire to vend near key destination nodes, such as the Power & Light District, the Convention Center, and the Truman Sports Complex (Arrowhead and Kauffman Stadiums). These destination nodes possess many of the characteristics that are important to vendors: proximity to temporary or special events, entertainment or sporting districts, and high pedestrian traffic. However, the interview results explain the district restrictions are exclusion zones because of developer agreements. For example, a clause in the 2004 agreement to develop the Power & Light District gave the developer the right to limit vending in the area. While it is unclear if these clauses are a form of business protectionism, it is unlikely that the policy will change in the near future. Although no cities examined in the policy review have similar restrictions, an approach to sidestep the exclusion zones is to designate vending zones near these districts. The city can also encourage developers to collaborate with food truck vendors, such as in the Truman Sports Complex to enhance the fan experience.

Implication on Urban Spaces: According to the spatial analysis, food trucks prefer to cater to particularly large concentrations of people, such as in close proximity to temporary or special events in these destination districts. As a result, food trucks can satisfy intermittent demand in these districts and add to the social atmosphere by increasing interaction. The hot spot analysis can assist in selecting designated vending zones, particularly near the Power & Light District and the Country Club Plaza.
**Time Limits***

**Guideline:** Provide public parking spaces that are available for at least two hours, preferably up to four hours. Ensure that vending is permitted until 2:00 a.m. in order for food trucks to satisfy unmet demand. Consider designating food truck parking spots for specific days or times.

**Reasoning:** Based on the survey results, vendors illustrated the need for food trucks to locate in one space for at least two hours in order to allow for adequate setup, cooking, and serving time. In addition, one of the biggest issues raised by vendors was the availability of public parking. The interview results highlighted public parking as a concern as well, noting that it is also difficult to find a solution to the problem. However, the policy review indicated that both Chicago and Portland allocate specific parking spaces for food trucks. For example, Chicago designated 23 parking areas. All four cities also allow vending late into the night, some as late as 3:00 a.m.

**Implications on Urban Space:** Access to public parking spaces is critical in order for food trucks to activate the street and urban spaces. The key to enlivening urban spaces in all areas of the city is the ability for food trucks to vend at multiple locations. The spatial analysis describes vending hot spots where parking spaces could be designated for food trucks, such as the key areas identified in the Street Restrictions and District Restrictions. Selected spaces could also encourage increased levels of activity in underutilized areas. Ensuring that food trucks can serve late into the night also allows them to partner with bars and other nightlife establishments that do not provide food, again satisfying unmet demand. Therefore, vendors can serve as “eyes on the street,” making urban spaces safer and more inviting at all times of the day.

**Vending on Private Property***

**Guideline:** Permit food trucks to locate on private property without a temporary use permit. Allow the process to remain a private contract between a food truck vendor and the individual property owner or lessee. The vendor should be required to keep the contract posted when operating in order to validate the agreement.

**Reasoning:** The survey results indicated that while it may be difficult to obtain permission to vend on private property, vending on private property is an easier route than fighting for inconsistent public parking. The interview results described a few occasions when vendors and property owners collaborated to arrange food truck activities. Therefore, removing additional permits that inhibit the ability of food trucks to operate on private property would encourage activity. In addition, none of the cities in the policy review require secondary permits for vending on private property. In fact, Portland recently removed a controversial permit cost associated with vending on private property. In Austin,
the city has avoided prescribing where and how food trucks situate on private property, thereby leading an entrepreneurial innovation that is facilitated, but not led by, the government. Food trucks must still obtain written consent from the property owner, but additional permit processes and costs do not burden vendors.

Implication on Urban Spaces: The spatial analysis revealed that food trucks are drawn to clusters of employment in office and commercial areas. As a result, the ability to locate on private property near these uses is critical. In fact, much of the extracted Twitter data included business names rather than street intersections, displaying that businesses and food trucks were willing to collaborate. Partnering with local businesses also provides an important vending option in contrast to competing for public parking; it provides a means for food truck activity to enliven dull parking lots and voids in the city.

Vending on Vacant Lots*

Guideline: Allow food trucks to locate on privately-owned vacant lots using the same procedure for vending on private property. Devise a program or short-term leasing structure to encourage food trucks as interim uses on publicly-owned vacant lots.

Reasoning: According to the survey results, vendors are overwhelming willing to locate on vacant lots. In addition, all of the vendors expressed interest in vending on publicly-owned vacant lots, which is currently not an option. According to the interview results, food trucks that locate on vacant lots are wildly popular and successful. Three of the cities in the policy review encourage food trucks to locate on vacant lots:

• Washington D.C. through its Temporary Urbanism initiative
• Austin by encouraging interim uses
• Portland by investigating city property that could be leased to food trucks

Implication on Urban Spaces: While the extracted Twitter data demonstrated that food trucks currently vend on privately-owned vacant lots, the spatial analysis revealed that publicly-owned vacant lots are not yet used in this manner. Vending on vacant lots provides a means to encourage urban activity through private sector initiatives, particularly on lots that are in limbo between its current state and a “highest and best use.” As a result, food trucks can activate commercial corridors, highlight retail potential, and provide unique options. The city can also identify specific vacant lots in food truck hot spots as vending locations in order to encourage activity and advertise the space. Otherwise, the lots sit empty and unused with no benefit to the community.

Public Health and Safety Certification Requirements

Guideline: Require all food truck employees to obtain a food handler license. Consider
offering training courses both in-person and online.

**Reasoning:** The survey results indicated that all of the vendors agreed that food handlers should have proper training and certification. The interview results indicated certification is an important requirement as well. All of the cities in the policy review have similar requirements to ensure public health and safety.

**Implication on Urban Spaces:** Food trucks with properly educated staff help denounce the myth that food trucks are unsanitary. As acceptance grows among the general population, food truck activity increases.

**Trash and Sanitation**

**Guideline:** Require all food truck vendors to provide at least one trash receptacle for customer use. Consider having vendors supply a hand-washing station or sanitizer dispenser for customers as well.

**Reasoning:** The survey demonstrated that all vendors provide trash receptacles and 90 percent of the vendors described the cleanliness of the vending location to be important. Although it was previously unclear if it was a requirement for a trash receptacle to be provided for customer use, the interview results clarified the notion. All cities in the policy review require trash receptacles as well. The survey also revealed that 40 percent of the vendors supply some type of customer hand-washing mechanism even though it is not required. While none of the cities in the policy review have a similar customer hand-washing policy, it is recommended to ensure public health.

**Implication on Urban Spaces:** Maintaining the cleanliness of an area encourages future activity and positive experiences within urban spaces. The requirement provides another means of using the private sector to care for public spaces as clean areas attract potential customers and pedestrians.

**Type and Frequency of Inspections**

**Guideline:** Schedule annual health inspections rather than "surprise" field inspections in order to examine both the vehicle and commissary for compliance. Consider evaluating food trucks using the same inspection structure as restaurants.

**Reasoning:** According to the survey results, vendors did not have major concerns with the current inspection method—scheduled health inspections once per year. However, one-third of the vendors were interested in being included in the same inspection structure as restaurants. According to the interview results, restaurants are inspected one to four times per year depending on a risk assessment. Under the structure, food trucks that consistently comply with codes would only be subject to an annual inspection, while those with issues would be required to pass more inspections depending on the risk. While the type and
frequency of inspections utilized by cities in the policy review varies, utilizing the same structure and expectations as restaurants provides consistency.

Implication on Urban Spaces: Scheduled health inspections, rather than surprise inspections, do not unexpectedly interfere with food truck activity. When certified as safe dining options, more individuals will feel comfortable eating from a food truck. Predictability, safety, and health verification give food trucks a better reputation and increase interest in food truck activity.

**Consistency of Enforcement**

Guideline: Designate personnel to perform food truck inspections in order to verify consistent evaluation and citations. Allow vendors fourteen days to correct violations before withdrawing permits.

Reasoning: The survey results indicated that a source of complaints is the lack of consistency among interpretation of the health code. The interview results also expressed that there is less tolerance for food trucks, even though both restaurants and food trucks tend to receive the same number of citations. Based on the policy review, Austin has one inspector devoted full-time to food trucks. If there is not enough demand for a full-time inspector, having the same one or two inspectors perform food truck inspections will ensure consistency. Food trucks in Portland are also given a 14-day period to remedy issues.

**Implication on Urban Spaces:** A lack of consistency creates an unpredictable regulatory environment. Failed inspections without fair opportunity to resolve violations will result in food trucks being denied permits, thus negatively impacting their ability to activate urban spaces.

**KEY FINDINGS AND STUDY IMPLICATIONS**

While all the policy areas are addressed to provide policy guidelines, a greater emphasis was placed on the nine areas in need of improvement in Kansas City, Missouri. A matrix presenting the policy areas is displayed in Table 6.1. The guideline for each policy area is specified, as well as the city department or departments the guideline impacts. While the policy matrix was created using Kansas City, Missouri as the study area, the general guidelines provide direction for other jurisdictions. Cities can examine their own policies using the framework structure in order to determine areas in need of improvement within their own community. The guidelines provide a benchmark for other cities to aim towards when revising their food truck policies.

Through knowledge gained through the methodology phases, the policy framework answers the primary research question. The framework and guidelines present improvements to food truck policies in order to enable the revitalization of urban spaces through food truck activity.
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### Public Health and Safety

#### District Restrictions
Provide designated vending zones near exclusion zones that result from developer agreements.

#### Certification Requirements
Require all food truck employees to obtain a food handler license. Consider offering training courses both in-person and online.

#### Time Limits
Provide public parking spaces that are available for at least two hours, preferably up to four hours. Ensure that vending is permitted until 2:00 a.m. in order for food trucks to satisfy unmet demand. Consider designating food truck parking spots for specific days or times.

#### Trash and Sanitation
Require all food truck vendors to provide at least one trash receptacle for customer use. Consider having vendors supply a hand-washing station or sanitizer dispenser for customers as well.

#### Vending on Private Property
Permit food trucks to locate on private property without a temporary use permit. Allow the process to remain a private contract between a food truck vendor and the individual property owner or lessee. The vendor should be required to keep the contract posted when operating in order to validate the agreement.

#### Type and Frequency of Inspections
Schedule annual health inspections rather than “surprise” field inspections in order to examine both the vehicle and commissary for code compliance. Consider evaluating food trucks using the same inspection structure used for restaurants.

#### Vending on Vacant Lots
Allow food trucks to locate on privately-owned vacant lots using the same procedure for vending on private property. Devise a program or short-term leasing structure to encourage food trucks as interim uses on publicly-owned vacant lots.

#### Consistency of Enforcement
Designate personnel to perform food truck inspections in order to verify consistent evaluation and citations. Allow vendors fourteen days to correct violations before withdrawing permits.
RELEVANCE TO THE PLANNING PROFESSION

The over-arching dilemma driving the study was the decline of active streets and urban spaces as a result of the separation of land uses and the auto-dominated urban landscape. As a “wicked problem” in the urban planning field, planners have explored and supported strategies to increase pedestrian activity on streets and within urban spaces. Over the past few decades, urban theorists including William Whyte and Ray Oldenburg have noted the impact food vendors have on urban spaces by drawing people outside and facilitating informal social interaction. With the recent boom of the food truck industry post-2008, food truck activity provides an opportunity to revitalize urban spaces through the allure of street food.

Multiple sources have previously highlighted the social, economic, and cultural benefits food trucks provide within a community. By occupying underutilized lots, fostering interaction and street vitality, promoting commercial activity, and satisfying unmet demand, food trucks represent an innovative, low-cost revitalization tool. In addition, several researchers have examined how to leverage the beneficial impacts of food trucks, including:

- Wessel’s study in San Francisco, California discovered that people were more connected to the social experiences provided by food truck activity rather than the physical attributes of the space.
- Tway’s study in San Francisco, California found that the spaces food trucks occupied were perceived to be more vibrant and active with their presence.
- Kapell’s study in Portland, Oregon provided statistical evidence that food trucks and carts encouraged street vitality, economic development, and unique cultural expressions.
- Mueller’s study in Austin, Texas determined that food trucks served as a low-cost revitalization tool on underutilized lots by activating the streetscape, promoting commercial activity, and disseminating culture.

Overall, the studies concluded that urban spaces were more vibrant and active when food trucks were present. As a result of the perceived benefits of food truck activity and the previous findings, this study treated the presence of food trucks in a community as positive and capable of serving as a catalyst for urban revitalization.

While food trucks are capable of providing these effects, city policies and regulations can often create barriers to food truck operation—and therefore inhibit the benefits of food truck activity. As a result, the study aimed to determine how cities can improve their food truck policies in order to enable the revitalization of urban spaces through food truck activity. Using
Kansas City, Missouri as the study area, the primary research question was explored through three secondary inquiries and their related methods. The first inquiry examined the spatio-temporal characteristics of food trucks through a GIS-based spatial analysis. The second inquiry engaged stakeholders through a survey of food truck vendors and interviews with city staff in order to discover conflicts that pose barriers to food truck activity. Lastly, the third inquiry utilized a policy review in key cities and the development of a policy framework to determine appropriate policy guidelines that enable food trucks to operate effectively within a city. A diagram illustrating the connections between the multiple phases of the study is displayed in Figure 7.1.

Through the exploratory process of building knowledge, the resulting food truck policy presents sixteen policy areas and their respective policy guidelines. In particular, nine of the policy areas are described as areas in need of improvement in Kansas City, Missouri. While the methodology phases utilized Kansas City, Missouri as the study area to develop the guidelines, the conclusions can inform stakeholders in other jurisdictions as well. The policy framework provides a structure for cities to utilize when analyzing their own regulations, with the guidelines providing a benchmark to strive towards.

Food truck activity can also play a role in the comprehensive planning process. For example, Portland’s food trucks and carts support the city’s long range plan which calls for neighborhoods where residents can easily walk or bike to meet all basic, non-work needs (Beresky, 2011). Because food trucks can locate temporarily in almost any area, they can help meet the city’s goal in areas where the physical layout of the neighborhood does not yet accommodate this ideal. The ability for food trucks to vend on private and public vacant lots is also one of the biggest opportunities for urban revitalization through food truck activity. Facilitating a process or structure to enable vending on vacant lots can further city objectives in underutilized parts of the community. As a result, proactively planning and designing for food truck activity can support city goals, particularly from a place-making and land use standpoint.

The proliferation of food truck activity has challenged planners and city staff to reconsider the role of streets and urban spaces. While the spaces are often seen as a means of transportation, city streets and spaces can become vibrant social spaces as well. When regulated appropriately, food trucks can provide numerous benefits and revitalization effects within the community.

**STUDY LIMITATIONS**

A few limitations constrained the study. First, the study relied on the participation of food truck vendors as well as city staff to provide information to examine
GOAL
Increase the urban revitalization effects by enabling food trucks to operate effectively

PHASE #1
Strengthen spatio-temporal characteristics of food trucks, in order to...

PHASE #2
Resolve stakeholder conflicts, in order to...

PHASE #3
Determine appropriate policies, in order to...
stakeholder conflicts. The sample size for the food truck vendor survey was not only limited by the number of food trucks operating in the Kansas City region, but even more so by the number of individuals for which contact information was available. Similarly, the interviews with city staff relied on a snowball sampling method to find employees who interact with food truck policymaking or enforcement. While the food truck vendor survey had a 75 percent response rate, the interviews proved more difficult. For example, some city personnel were unwilling to participate in phone interviews but responded via email, or were not interested in contributing altogether.

The second major issue involved time and travel limitations. While the food truck vendor survey provided quality data, in-depth interviews or focus groups may have produced even better results. However, because of the researcher’s time limitations as well as the vendor’s varying schedules, arranging interviews or focus groups would have been difficult. Similar issues also forced the interviews with city staff to occur via phone rather than in-person.

Third, the extracted Twitter data for the spatial analysis produced point data on city streets. Because streets are often the boundaries for geographic regions, some data could not be utilized without ecological fallacy. For example, the U.S. Census Bureau through the American Community Survey provides data by census tracts—and many of the food truck locations were on streets that serve as boundaries for the tracts. Therefore, some data sources were not available due to the possibility of ecological fallacy.

FUTURE RESEARCH OPPORTUNITIES

As a recent phenomenon in the urban landscape, there are several opportunities to continue analyzing the benefits provided by food truck activity. While the study engaged food truck vendors and city staff, the project did not involve interaction with the community itself. Engaging urban space users could provide greater insight into the way people socially interact in spaces when food trucks are present versus the space without them. From a cultural perspective, studies could explore the types and

[Figure 7.1] Study Connections

The final outcome, the food truck policy framework, and the three phases of the methodology answered the primary research question and achieved the goal of the study. (Author, 2014)
[Figure 7.2] Truck Stop at the Crossroads

Food trucks congregate on a vacant lot for the monthly “First Friday” event in the Crossroads Arts District in Kansas City, Missouri. (KCFoodTrucks, 2012a)
proactive policy approach in support of food truck activity. There are multiple challenges and opportunities related to food truck activity. However, when permitted to operate effectively, food trucks can revitalize urban spaces by occupying underutilized lots, creating more intensive land uses, and increasing foot traffic and activity. The scale and mobility of food trucks enables them to disperse and capitalize on opportunities in urban spaces that larger, immovable projects are incapable of.

Policy modifications permit food trucks to operate more effectively in Kansas City, Missouri. As a result, the city can capitalize on the urban revitalization effects of food truck activity, as depicted in Figure 7.2 on the vacant lot known as “The Truck Stop” that has become a popular Kansas City destination. As a recent topic in planning literature, the study provides policy direction for other jurisdictions and adds to the growing knowledge base related to food truck activity and its associated benefits. Appropriate policies that balance the needs of stakeholders allow food trucks to operate effectively, thus augmenting the benefits and urban revitalization effects that food truck activity provides within a community.

uniqueness of cuisine served from food trucks. From an economic perspective, a long-term study of commercial reinvestment in food truck vending locations could provide statistical evidence concerning the revitalization effects of food trucks.

Other research opportunities could explore food trucks serving in new capacities—for example, the capacity to form public-private partnerships to encourage food trucks to provide healthy options in food deserts. A study of programmatic elements could also provide insight for designing spaces for food truck clusters or pods. Lastly, another important study opportunity relates to the method utilized for the spatial analysis. Using Twitter served as a free and simple way to collect data. Twitter and other social media outlets provide information that can be coded with relative ease, compared to time-consuming surveys or interviews. Collecting data from these sources with the intention of using it to influence planning and design initiatives has immense potential.

**FINAL THOUGHTS**

The study explored the dynamic relationship between food truck vendors, regulating bodies, and urban spaces to inform a
REFERENCES


KCFoodTrucks. (Photographer). (2013a, August 12). This is a great picture from Wilma’s Real Good Food during the fundraiser [Web Photo]. Retrieved from https://www.facebook.com/KCFoodTrucks.


GLOSSARY OF TERMS

Types of Vending

Street Vending: the retail or wholesale trading of goods and services in streets and other related public spaces such as alleyways, avenues, and boulevards; can be fixed, occasionally mobile, or almost continuously mobile (Bromley, 2011)

Mobile Vending: a method of selling items by carrying merchandise on your person, operating a cart or stall on wheels, or utilizing a motor vehicle (Bromley, 2000)

Pushcart: a wheeled vehicle pushed by a person for vending purposes (Ibrahim, 2011)

Chuck Wagon: a wagon with cooking facilities to provide food on a ranch, worksite, or campsite; chuck is slang for heart-warming comfort food such as meats, potatoes, and biscuits (Ibrahim, 2011)

Lonchera: a taco truck; from the Spanglish word *lonche*, meaning lunch; commonly referred to by Latinos as any homemade meal packed for consumption away from the home (Ibrahim, 2011)

Food Truck: a large vehicle equipped with facilities for cooking and selling gourmet food that moves from location to location on a daily basis (Ibrahim, 2011)

Commissary: a central preparation facility or other fixed food establishment that food trucks report to for supplies and servicing operations (Frommer, 2011)

Planning Concepts

Public Space: all areas that are open and accessible to all members of the public in a society, in principle though not necessarily in practice; while public spaces can include public buildings, it can include some private buildings like malls, and even virtual networking sites (Orum, 2010)

Third Place: a place where people regularly meet for relaxation outside of the home [the first place] or workplace [the second place] (Oldenburg, 1999)

Lively Street: a street with the presence of a number of people engaged in a variety of activities that are social in nature; also called an active street (Mehta, 2007)

Community: a readily available, mutually supportive network of relationships upon which one could depend and as a result of which one does not experience sustained loneliness (Fremlin, 2013)

Interim Use: the temporary activation of vacant land or buildings with no foreseeable development demand (Blumner, 2006)

Tactical Urbanism: urban interventions that involve quick, often temporary, and less expensive projects that aim to make a small part of a city more lively or enjoyable (Tanenbaum, 2012)
CODE OF ORDINANCES OF KANSAS CITY, MISSOURI

Code of Ordinances of Kansas City, Missouri
Volume II, Chapter 50 - Offenses and Miscellaneous Provisions, Article XI. Street Vending

Sec. 50-451. Definitions.
The following terms shall have the following definitions for purposes of construing this article, except where the context clearly implies that another definition was intended:

Mobile unit: A vehicle-mounted restaurant type establishment designed to be readily movable.
Push cart: A non-self-propelled vehicle used for street vending.
Street vending: the act of selling, hawking, peddling, or offering to sell, hawk or peddle any personal service or item, perishable or otherwise, in or upon any public street, public sidewalk, public alley, public way, public building, public park, or other public place in the city.
Street vendor: One who sells, hawks, peddles, or offers to sell, hawk or peddle any personal service or item, perishable or otherwise, in or upon any public street, public sidewalk, public alley, public way, public building, public park, or other public place in the city.

(Ord. No. 060056, § 1, 1-19-06)

Sec. 50-452. General provisions.
(a) No person shall engage in street vending except as specifically authorized by this article.
(b) Subject to the conditions established by this article, and except as otherwise prohibited by section 50-454, street vending shall be permitted in or upon any public street, public sidewalk, public alley, or public way, within the city.

(Ord. No. 060056, § 1, 1-19-06)

Sec. 50-453. Conditions.
(a) The following conditions are made applicable to street vending within the city:

(1) Any lawful service or item may be sold, hawked or peddled, or offered for sale, hawking or peddling, except that any items other than newspapers, magazines, periodicals, flowers, food or beverage may be sold, hawked or peddled, or offered for sale, hawking or peddling only from a push cart or from the street vendors person.

(2) Any person engaging in street vending must apply for and obtain all business licenses and permits required by: chapter 40 of this Code, and must maintain those licenses and permits in a current state.

(3) Any person engaging in street vending who offers to the public any food or beverage item must also apply for and obtain all licenses and permits required by Chapter 30 of this Code, and must maintain those licenses and permits in a current state.

(4) A vendor certificate including all required licenses and permits must be prominently displayed on the vehicle or push cart from which the street vendor operates, and in a manner prescribed by the directors of the department of finance and department of health, or the department of parks and recreation, as applicable. If a street vendor vends without a push cart or mobile unit, the street vendor must prominently display a hanging street vendor certificate upon his or her person. It shall be a violation of this article to vend without a properly displayed vendor certificate.

(5) Any person engaging in street vending shall have prominently displayed upon the side of the vehicle or push cart from which the street vendor operates his or her name or the name of his or her business, if registered with the secretary of state, in letters not less than four inches in height.

(6) Any street vendor who changes his or her place of residence or business, or who
transfers ownership of the vehicle or push cart from which the street vendor operates, shall notify the department of finance and department of health of the change or sale, as applicable, within 15 days.

(7) Street vendors shall not sell or attempt to sell any item or attempt to make any sale within one block of a school on a day in which school is in session during the 30 minute period preceding school or the 30 minute period after adjournment.

(8) No person under the age of 16 years, other than the street vendor or the street vendors employees, shall be allowed in or upon any vehicle or push cart engaged in street vending.

(9) No street, alley or way, public or private, shall be blocked by the street vendors vehicle or push cart, or by anything being offered for sale, hawking or peddling.

(10) Where the street vending occurs on a public sidewalk, a three-foot passageway for pedestrians shall be left open, and all merchandise shall be securely and adequately placed so as not to endanger a passerby or protrude into any street, alley or way.

(11) Street vendors shall not sell, hawk or peddle, or offer to sell, hawk or peddle any service or item in a manner which causes a nuisance, creates a fire hazard, interferes with the flow of vehicular and pedestrian traffic, or interferes with ingress or egress to or from any occupied building.

(12) Street vendors shall not sell, hawk or peddle, or offer to sell, hawk or peddle any service or item in a manner or location that would result in the vendors violation of any ordinance, including but not limited to those ordinances pertaining to parking and traffic control.

(13) Street vendors selling, hawking or peddling, or offering to sell, hawk or peddle any service or item must comply with all ordinances applicable to the business in which they are engaged and the services and items being offered to the public.

(14) Street vendors offering food or beverage shall provide a trash receptacle and must clean the litter and food deposits from that receptacle as often as necessary to ensure compliance with all applicable health code ordinances and regulations, but in no event less than once per day.

(15) Street vendors shall not sell, hawk or peddle, or offer to sell, hawk or peddle any service or item within 50 feet of a public entrance of an established business offering similar products to the public during the hours that the business is open to the public. For purposes of this article, one cannot sell, hawk or peddle food items within 50 feet of a restaurant, deli, cafeteria or other eating establishment selling food items during the time it is open for business.

(b) The failure of a street vendor to satisfy any of the conditions established by this article shall render the street vending unlawful.

(Ord. No. 060056, § 1, 1-19-06)

Sec. 50-454. Prohibited locations.

(a) Street vending is prohibited at the following locations:

(1) In or upon any public street now or hereafter designated by the city council as a trafficway, boulevard or parkway, except as permitted by subsection 50-454(3).

(2) In or upon any public street, public sidewalk, public alley, or public way of the territory bounded by Brookside Boulevard and Ward Parkway on the south, Summit Street on the west, 45th Street on the north and Grand Avenue on the east, such streets being included.

(3) In or upon any public street, public sidewalk, public alley, or public way on or along 13th street between the centerline of Broadway Boulevard and the centerline of Wyandotte, on or along 14th street between the centerline of Broadway and
the centerline of Central, on or along the south side of the 14th street right-of-way from centerline of Central to the centerline of Wyandotte, on or along the “West side of Central street from the centerline of the right-of-way of 12th street and the centerline of 13th street, on or along Central street between the south side of 13th street from the centerline of 13th street and the southernmost edge of the 14th street right-of-way, and with the exception of mobile units, on or along Central Street from the centerline of 12th street to the auditorium parking garage entrance lanes.

(4) In or upon any public street, public sidewalk, public alley, public way, public building, public park, or other public place in the city bearing postings placed by the city indicating that street vending is prohibited.

(5) In or upon any public street, public sidewalk, public alley, public way, public building, public park, or other public place in the city where engaging in street vending would result in a violation of this Code.

(6) Within the Truman Sports Complex on the property, including all roads, parking lots, sidewalks, walkways or plazas, enclosed by the road known as Dubiner Circle, except for sales by any tenant of the Truman Sports Complex or its designee.

(7) Reserved.

(b) Vending in any public building or other public place not specifically provided for by this article is prohibited except as may be authorized by the governmental agency having charge of the facility. Such vending shall comply with all the conditions applicable to street vendors.

(c) Street vending in or upon any property under the jurisdiction of the department of parks and recreation, including any and all public streets, public sidewalks, public alleys, public ways, public buildings and other public places in or upon the property, is prohibited unless authorized by the director of parks and recreation or his designee. Any authorized vending in or upon any property under the jurisdiction of the department of parks and recreations shall be conducted in accordance with the terms and conditions applicable to street vendors and such additional rules and regulations as may be established by the department.

(Ord. No. 060056, § 1, 1-19-06; Ord No. 120217 §§ 1, 2, 3-15-12; Ord No. 120926 § 2, 11-8-12)

Sec. 50-455. Exemptions.

(a) Nothing in this article shall be construed to prohibit businesses from operating a sidewalk cafe, provided they have obtained an annual sidewalk cafe permit pursuant to section 64-164.

(b) Nothing in this article shall be construed to alter or prohibit the operation of any municipal market, presently existing or established in the future by an act of the city council.

(c) Nothing in this article shall be construed to prohibit street vending within an area closed by special permit issued by the city, including, but not limited to, permits for street fairs, parades and block parties, but vendors must comply with permitees’ vending requirements.

(d) Nothing in this article shall be construed to prohibit street vending in a marked city-designated vending area.

(Ord. No. 060056, § 1, 1-19-06)

Sec. 50-456. Related provisions.
Nothing contained within this article shall be construed as to alter or amend any provision of this Code relating to the licensing, permitting, taxation, and regulation of street vendors, or to the licensing, permitting, taxation and regulation of the service or thing being sold, hawked, peddled, or offered for sale, hawking or peddling.

(Ord. No. 060056, § 1, 1-19-06)
Sec. 50-457. Vendor certificates required on private property, when.
(a) Any person vending from a mobile unit or push cart upon any private property within the city must obtain and display a vendor certificate, including all required licenses and permits, as provided by section 50-453(d).
(b) For the purposes of this section, street vending as defined in section 50-451 shall also include the act of selling, hawking, peddling, or offering to sell, hawk or peddle any personal service or item, perishable or otherwise, in or upon any private property within the city.
(Ord. No. 060056, § 1, 1-19-06)

Sec. 50-458. Penalties and enforcement.
(a) Penalties. Any violation of this article is an ordinance violation and shall be punishable by a fine not exceeding $500.00 or by imprisonment of not more than 180 days or both. Each offense shall constitute a separate and distinct offense.
(b) The city police department shall be charged to enforce and carry out the provisions of this article.
(c) City departments having responsibility under this or other related laws have authority to enforce the provisions of this article.
(Ord. No. 060056, § 1, 1-19-06)

Sees. 50-459---50-474. Reserved.

KANSAS CITY PARKS AND RECREATION VENDING POLICY

Revision Date: December 5, 2006

The Director of Parks and Recreation is authorized to establish rules, regulations and fee schedules or vending permits in City Parks pursuant to, and not inconsistent with, ordinance No. 060056. Vending permits will be at fixed locations designated by the Parks and Recreation Department. All applications will be reviewed by the Parks Director or authorized designee. Park vending permits will be granted to those applicants who best meet the needs of the public that the Parks and Recreation Department is trying to serve at locations deemed appropriate by the Parks and Recreation Director. It is strongly recommended that an applicant obtain preliminary park vending permit approval before purchasing vending equipment or City licenses, because only a limited number of park vending permits will be issued.

Application Procedures
(1) All persons, partnerships and corporations interested in vending in a City park are required to submit the following documents to the Parks and Recreation Department, 4600 E. 63rd Street, Kansas City, MO 64130; (816) 513-7720. A letter of application which includes the applicants full name; name of business; residence and business addresses, phone numbers, and email address; the type of vending permit requested (standard or healthy); and the vending location requested. A photograph and measurements of the vending unit to be used in the vending operation. A typed list of items to be sold and the prices to be charged for same.

(2) A letter confirming preliminary approval will be issued by the Parks and Recreation Department should the application be approved. Once confirmation has been received, the following documents must be submitted to the Vending Permit Section prior to the issuance of a park vending permit. Failure to submit all documents within 30 days from the date of preliminary permit approval shall render the application null and void without additional notice. A copy of the food permit obtained from the Health Department, 2400 Troost Avenue, Kansas City, MO 64108; (816) 513-6008; health@kcmo.org. A copy of the occupation license issued by the
Revenue Division, 414 E. 12th Street, Kansas City, MO 64106; (816) 513-1124; planning@kcmo.org. Present proof of insurance in the amount of $25,000/$50,000 bodily injury and property damage in the amount of $10,000, and auto liability of at least $250,000 for vendors using vehicles for food/beverage vending (such as ice cream vans, etc.). A completed and signed application form (provided with preliminary approval letter), which includes a statement that the applicant will adhere to all City ordinance provisions, and Parks and Recreation Department rules and regulations governing sidewalk and mobile unit vending. A cashier’s check or money order in the amount as stated in the preliminary approval letter made payable to the Kansas City Parks and Recreation Department (This fee may be prorated for terms of less than one year).

**General Vending Rules & Regulations for City Parks**

(3) A vendor certificate including all required licenses must be prominently displayed on the mobile unit from which the vendor operates. Park vendors must keep a copy of the approved Parks and Recreation application available for inspection at all times.

(4) A park vending permit shall be valid from the date issued until December 31 of the current year, and may be renewed between December 1 and December 31 for the following year for a period not to exceed two consecutive years.

(5) Parks and Recreation Department reserves the right to limit the number of vendors allowed in any one park and the total number of permits issued in any one year. The department further reserves the right to limit the vending unit size based on park aesthetics and available vending space in each park.

(6) No person, partnership or corporation will be issued more than two park vending permits at any one time.

(7) The fee for a park vending permit shall be $500 per year payable in advance; however this fee may be prorated for terms of less than one year. A permit is required for each vending unit in one authorized park; allowances for multiple parks for one permit fee may be granted under the “Healthy Vending” requirements.

(8) A park vending permit may be revoked at any time by the Parks and Recreation Director upon seven days notice by mail to the permit holder’s business address of record. No refund of permit fees will be granted.

(9) The business of park vending shall be conducted between the hours of 6:00 a.m. to 11:00 p.m.

(10) Every park vendor shall indemnify and save harmless the City of Kansas City from all suits or actions brought against the City for or on account of any injuries or damages received or sustained by any party or parties by or from said vendor, his/her employees or agents, or by or on account of any act or omission of said vendor.

(11) Permits shall not be assigned by in whole or part, nor any portion of the premises sublet.

(12) A park vending permit does not grant exclusive use of the area assigned. Special events permitted in adjacent areas are allowed to provide vendors during the course of such an event. Further, the Director reserves the right to exclude dates from the vending permit if special event, festival, fair or parade permits are issued within 300’ of the park vending permit location.

(13) The items to be offered for sale at park locations shall include food and non-alcoholic beverages only. Park vendors are not authorized to sell services, merchandise or souvenirs. All products offered for sale and for public consumption by park vendors, shall be number one, first grade quality. All Federal, State, and local regulations pertaining to the quality of products offered for sale shall be met by vendors.

(14) Park vendors shall dispense all beverages and liquids in cans or paper/plastic cups. No glass bottles or containers shall be served to customers in the park.

(15) Park vendors shall provide at their own expense all equipment necessary to provide the items
for sale in the conduct of the business. All equipment used shall be in a self-contained unit. No storage area, water, electric or other utilities will be supplied by the Parks and Recreation Department. Generators may be used in the vending operation with approval from the Parks Director or authorized designee.

(16) Pushcarts or other vehicles and equipment related to the vending operation shall not be parked, stored or left overnight in any park location.

(17) Park vendors shall not block the passage of the public through a public area or interfere with access to ramps, curb cuts or other conveniences for individuals with disabilities.

(18) Park vendors shall not leave their pushcart or other vehicle or equipment unattended at any time.

(19) Park vendors shall collect all litter and garbage generated in the operation of the business at the end of each business day and remove same from the park. In addition, vendors shall retrieve any containers or food or litter that may be carried away and left on the park grounds. Vendors may not put refuse from the operation of their business in or beside any public trash container or in any drain along or in the streets or sidewalks.

(20) Permits shall be issued on a first come basis. The Vending Permit Section will file and maintain a list of permit requests in chronological order. Requests will remain on file for two years.

(21) Each vending unit shall be inspected and approved by the Parks and Recreation Department. Each vending unit shall be kept in a clean and sanitary condition at all times.

Healthy Vending Guidelines & Requirements
To increase access to healthier food and beverage alternatives in our parks, the Kansas City Parks and Recreation Department encourages vendors to implement the following food and beverage guidelines. Healthy vending will fall into two categories: “Healthier” and “Healthiest.” Inclusion in one of these categories will depend upon the percentage of healthy items for sale.

“Healthier” Food Vendors – Vendors in this category will be required to have 50% of items for sale that adhere to the nutrition guidelines below. “Healthier” food vendors will receive a 50% reduction in the cost of a Parks and Recreation Vending Permit.

“Healthiest” Food Vendors – Vendors in this category will be required to have 75% of items for sale that adhere to the nutrition guidelines below. “Healthiest” food vendors will receive a “roaming” Parks and Recreation Vending Permit for $500. “Roaming” permits allow vending in three parks, based on availability, with one permit. “Roaming” permits do not guarantee exclusive rights to any one park. A suggested list of healthier food/beverage items is attached at the end of this policy. Guidelines for the healthier alternatives are as follows:

Food Nutrition Guidelines
• 5 grams of Total Fat or fewer per serving (not including nuts and seeds).
• 30 grams of Carbohydrates or fewer per serving (Candy is not considered to be healthy; fruit in any form is permitted, regardless of carbohydrate count).
• Foods such as non-fat or low-fat hotdogs or similar items may be considered a healthier alternative to regular hotdogs or similar items.

Beverage Nutrition Guidelines
• Beverages that contain 50 percent fruit or vegetable juice with no added sweeteners.
• Water – Pure or vitamin enhanced.
• Milk – Lowfat (1%) or Nonfat preferred, any flavor
• Low-Calorie Beverage – <50 calories per 12 oz. serving
**Mandatory Pricing Standards**

Food/Beverages meeting the nutrition guidelines must be sold at a price that is not more than 10% over the price of similar food/beverages that do not meet these nutrition guidelines.

**Oversight**

Healthier vendors will be routinely monitored by Parks and Recreation to assure full compliance of rules and regulations, as well as ensure healthier items for sale are on-hand and meet the nutrition guidelines.

**Permit Revocation**

The Parks and Recreation Department reserves the right to revoke a permit:

- Should park vendors fail to abide related City ordinances, and the Parks and Recreation Department policy on vending. No refund will be issued and the permit (decal) will be forfeited.
- In cases where excessive (as determined by Parks and Recreation) litter, grease, and/or other debris results from the vending activity.
- Should the park vendor become involved in misconduct, misbehavior, and/or illegal activity. Examples of this type of behavior might include, but not be limited to, the use of profanity or discriminatory practices.

**Authorized Parks for Vending**

**North Region**

- **The Concourse**
- Benton Blvd and St. John Ave
- **Kessler Park**
- Paseo to Belmont Blvd
- **Maple Park**
- Maple Blvd and Lexington Ave
- **Budd Park**
- St. John Ave & Brighton Ave

**Central Region**

- **Illus W. Davis Park**
- 11th & Oak
- **Washington Square**
- Pershing & Main Street
- **Mill Creek Park**
- 47th & Main

**South Region**

- **Sunnyside Park**
- 83rd St and Summit
- **Tower Park**
- 75th & Holmes
- **Holmes Park**
- 69th & Holmes
- **Longview Tract**
- 7101 Longview Rd

- **Waterworks Park**
- NE 32nd Street and N Oak Trafficway
- **Lakewood Greenway**
- I-35 to Penguin Park
- **Penguin Park**
- Vivion Road and N. Norton Ave
- **Harmony Park**
- E. 10th St & Agnes Ave

- **Penn Valley Park**
- Broadway to SW Trafficway only
- **Brush Creek Channel**
- Roanoke Parkway to Elmwood

- **Swope Park**
- Elmwood to 67th to Gregory Blvd and parking lot at Oldham Road and Gregory Blvd

- **Gregory Minor Park**
- 111th & Red Bridge Rd
  (excluding golf course proper)
<table>
<thead>
<tr>
<th>Suggested Items for Healthier Vending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthiest</td>
</tr>
<tr>
<td><strong>Snacks</strong></td>
</tr>
<tr>
<td>Animal Crackers, Graham Crackers</td>
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<td></td>
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<tr>
<td></td>
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<tr>
<td>Nuts and seeds - plain or with spices</td>
</tr>
<tr>
<td>Trail Mix - cereals and dried fruit (no fat added)</td>
</tr>
<tr>
<td>Fresh, canned or individually packed fruit - natural juices only</td>
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<tr>
<td>Dried fruit - raisins, dried cranberries, fruit leather</td>
</tr>
<tr>
<td>Pretzels - any flavor</td>
</tr>
<tr>
<td>Fat-Free Popcorn</td>
</tr>
<tr>
<td>Beef Jerky - 95% Fat Free</td>
</tr>
<tr>
<td>Yogurt - non-fat or light</td>
</tr>
<tr>
<td>Sugar-free Gelatin</td>
</tr>
<tr>
<td><strong>Beverages</strong></td>
</tr>
<tr>
<td>Milk, any flavor - non-fat or 1%</td>
</tr>
<tr>
<td>Juice - fruit or vegetable that contains 100% juice</td>
</tr>
<tr>
<td>Water, pure</td>
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<tr>
<td></td>
</tr>
</tbody>
</table>
## SPATIAL ANALYSIS DATA

Posts were recorded from the Twitter feeds of fifteen vendors for the seven-month period from April 2013 through October 2013. Only location specific messages within the greater Kansas City region were collected. The seven-county region includes Platte, Clay, Jackson, and Cass Counties in Missouri and Wyandotte, Leavenworth, and Johnson Counties in Kansas. The messages primarily included street names or an intersection. In the cases, where a specific business was discernible from the post, the address was recorded after verifying the location. The frequency of food truck visits at that location over the study time frame is also identified.

<table>
<thead>
<tr>
<th>DATE</th>
<th>TRUCK</th>
<th>LOCATION</th>
<th>ADDRESS</th>
<th>CITY, STATE, ZIP</th>
<th>COUNT</th>
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<tbody>
<tr>
<td>4/2/2013</td>
<td>Monks Roast Beef</td>
<td>13th &amp; Oak</td>
<td>E 13TH ST &amp; OAK ST</td>
<td>KANSAS CITY, MO</td>
<td>22</td>
</tr>
<tr>
<td>4/3/2013</td>
<td>Monks Roast Beef</td>
<td>13th &amp; Oak</td>
<td>E 13TH ST &amp; OAK ST</td>
<td>KANSAS CITY, MO</td>
<td>22</td>
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<td>4/3/2013</td>
<td>Crave of KC</td>
<td>5799 Broadmoor</td>
<td>5799 BROADMOOR ST</td>
<td>MISSION, KS</td>
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<tr>
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<td>Monks Roast Beef</td>
<td>Hospital Hill</td>
<td>2411 HOLMES ST</td>
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<td>4/5/2013</td>
<td>Chef Baldee’s Pizza</td>
<td>All-tech Electric Contracting</td>
<td>6400 110TH ST</td>
<td>OVERLAND PARK, KS</td>
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<tr>
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<td>Crave of KC</td>
<td>Good Ju Ju</td>
<td>1420 13TH ST</td>
<td>KANSAS CITY, MO</td>
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<td>4/5/2013</td>
<td>Wilma’s Real Good Food</td>
<td>The Kultured Chameleon</td>
<td>1739 OAK ST</td>
<td>KANSAS CITY, MO</td>
<td>1</td>
</tr>
<tr>
<td>4/5/2013</td>
<td>The Funnel Cake Truck</td>
<td>Truck Stop in Crossroads</td>
<td>W 21ST ST &amp; WYANDOTTE ST</td>
<td>KANSAS CITY, MO</td>
<td>29</td>
</tr>
<tr>
<td>4/5/2013</td>
<td>Indios Carbonsitos</td>
<td>Truck Stop in Crossroads</td>
<td>W 21ST ST &amp; WYANDOTTE ST</td>
<td>KANSAS CITY, MO</td>
<td>29</td>
</tr>
<tr>
<td>4/5/2013</td>
<td>Cajun Cabin</td>
<td>Truck Stop in Crossroads</td>
<td>W 21ST ST &amp; WYANDOTTE ST</td>
<td>KANSAS CITY, MO</td>
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<td>Prairie Fire Oven</td>
<td>Somerset Ridge Winery</td>
<td>PAOLA, KS</td>
<td>66071</td>
<td></td>
</tr>
<tr>
<td>7/3/2013</td>
<td>Beauty of the Bistro</td>
<td>The Red Shed</td>
<td>KANSAS CITY, MO</td>
<td>64101</td>
<td></td>
</tr>
<tr>
<td>7/3/2013</td>
<td>Monks Roast Beef</td>
<td>The Red Shed</td>
<td>KANSAS CITY, MO</td>
<td>64101</td>
<td></td>
</tr>
<tr>
<td>7/3/2013</td>
<td>DecoCatering KC</td>
<td>Farmers Insurance</td>
<td>OLATHE, KS</td>
<td>66061</td>
<td></td>
</tr>
<tr>
<td>7/3/2013</td>
<td>The Funnel Cake Truck</td>
<td>Hotel Sorella</td>
<td>KANSAS CITY, MO</td>
<td>64112</td>
<td></td>
</tr>
<tr>
<td>7/3/2013</td>
<td>Beauty of the Bistro</td>
<td>199th &amp; Metcalf</td>
<td>STILWELL, KS</td>
<td>66013</td>
<td></td>
</tr>
<tr>
<td>7/3/2013</td>
<td>Cajun Cabin</td>
<td>2306 Bannister</td>
<td>KANSAS CITY, MO</td>
<td>64197</td>
<td></td>
</tr>
<tr>
<td>7/3/2013</td>
<td>DecoCatering KC</td>
<td>Freightquote</td>
<td>KANSAS CITY, MO</td>
<td>64114</td>
<td></td>
</tr>
<tr>
<td>7/3/2013</td>
<td>Prairie Fire Oven</td>
<td>KU Medical Center</td>
<td>PRAIRIE VILLAGE, KS</td>
<td>66208</td>
<td></td>
</tr>
<tr>
<td>7/3/2013</td>
<td>Indios Carbonsitos</td>
<td>200 East 25th</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
<td></td>
</tr>
<tr>
<td>7/3/2013</td>
<td>Crave of KC</td>
<td>BRR Architecture</td>
<td>MERRIAM, KS</td>
<td>66204</td>
<td></td>
</tr>
<tr>
<td>7/3/2013</td>
<td>Indios Carbonsitos</td>
<td>Freightquote</td>
<td>KANSAS CITY, MO</td>
<td>64114</td>
<td></td>
</tr>
<tr>
<td>7/3/2013</td>
<td>Indios Carbonsitos</td>
<td>Freightquote</td>
<td>KANSAS CITY, MO</td>
<td>64114</td>
<td></td>
</tr>
<tr>
<td>7/3/2013</td>
<td>The Funnel Cake Truck</td>
<td>Mahaffie Stagecoach Stop</td>
<td>KANSAS CITY, MO</td>
<td>64106</td>
<td></td>
</tr>
<tr>
<td>7/12/2013</td>
<td>Wilma's Real Good Food</td>
<td>13th &amp; Oak</td>
<td>LEAVENTHOM, KS</td>
<td>66048</td>
<td></td>
</tr>
<tr>
<td>7/12/2013</td>
<td>Indios Carbonsitos</td>
<td>2911 Grand</td>
<td>KANSAS CITY, MO</td>
<td>64106</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C | Twitter Data 147
<table>
<thead>
<tr>
<th>Date</th>
<th>Restaurant Name</th>
<th>Address</th>
<th>City, State</th>
<th>Zip Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/26/2013</td>
<td>The Funnel Cake Truck</td>
<td>Monkey &amp; Metcalf</td>
<td>STILWELL, KS</td>
<td>66013</td>
</tr>
<tr>
<td>10/24/2013</td>
<td>The Funnel Cake Truck</td>
<td>Admiral 70th &amp; Broadway</td>
<td>OVERLAND PARK, KS</td>
<td>66213</td>
</tr>
<tr>
<td>10/23/2013</td>
<td>The Funnel Cake Truck</td>
<td>2411 Holmes St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/22/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/21/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/20/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
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<tr>
<td>10/19/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
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<tr>
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<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
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<tr>
<td>10/17/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
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<td>10/16/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
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</tr>
<tr>
<td>10/15/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/14/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
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<tr>
<td>10/13/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/12/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/11/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/10/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/09/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/08/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/07/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/06/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/05/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/04/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/03/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/02/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
<tr>
<td>10/01/2013</td>
<td>The Funnel Cake Truck</td>
<td>2101 Main St</td>
<td>KANSAS CITY, MO</td>
<td>64108</td>
</tr>
</tbody>
</table>

**Appendix C | Twitter Data**
CURRENT DYNAMICS

1. How long has your business been operating in the Kansas City region? (Select one)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 6 months</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>6 months - 1 year</td>
<td>2</td>
<td>18%</td>
</tr>
<tr>
<td>1 year - 2 years</td>
<td>2</td>
<td>18%</td>
</tr>
<tr>
<td>2 years - 3 years</td>
<td>3</td>
<td>27%</td>
</tr>
<tr>
<td>3 years - 4 years</td>
<td>3</td>
<td>27%</td>
</tr>
<tr>
<td>More than 4 years</td>
<td>1</td>
<td>9%</td>
</tr>
</tbody>
</table>

2. What is the status of your business relationships? (Select one response per statement to indicate your level of agreement)

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to work with my commissary facility to obtain necessary supplies.</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>3.73</td>
<td>1.01</td>
</tr>
<tr>
<td>Overall, storefront businesses are welcoming of food trucks.</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>2.82</td>
<td>0.87</td>
</tr>
<tr>
<td>I am not concerned about competition with other food truck vendors.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>3.91</td>
<td>0.94</td>
</tr>
<tr>
<td>Customers enjoy the unique food and experience my business provides.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>9</td>
<td>4.82</td>
<td>0.40</td>
</tr>
<tr>
<td>Overall, the general public has a positive perception towards food trucks.</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>3.64</td>
<td>0.81</td>
</tr>
</tbody>
</table>

3. What do you think are the three biggest misconceptions the general public has about food trucks? (Rank 1, 2, and 3)

<table>
<thead>
<tr>
<th>Question</th>
<th>1st Choice</th>
<th>2nd Choice</th>
<th>3rd Choice</th>
<th>Total</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running a food truck is easy.</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>11</td>
<td>1.91</td>
<td>0.94</td>
</tr>
<tr>
<td>They are a means to make a lot of money quickly.</td>
<td>0</td>
<td>6</td>
<td>2</td>
<td>8</td>
<td>2.25</td>
<td>0.46</td>
</tr>
<tr>
<td>They do not pay local taxes.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>6.50</td>
<td>4.95</td>
</tr>
<tr>
<td>They serve substandard food.</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3.40</td>
<td>1.52</td>
</tr>
<tr>
<td>They are unsanitary.</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>1.80</td>
<td>1.10</td>
</tr>
<tr>
<td>The trucks are unsightly.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>6.00</td>
<td>4.24</td>
</tr>
<tr>
<td>They can park wherever they want.</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>2.50</td>
<td>1.07</td>
</tr>
<tr>
<td>They have an unfair advantage due to their mobility.</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3.00</td>
<td>2.83</td>
</tr>
<tr>
<td>They cause street and/or sidewalk congestion.</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4.50</td>
<td>4.95</td>
</tr>
<tr>
<td>Only younger adults eat at food trucks.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>5.00</td>
<td>2.83</td>
</tr>
<tr>
<td>Other [option to enter text]</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
### PERMITTING AND ENFORCEMENT

4. How satisfied as you with the current Kansas City, Missouri food truck regulations? (Select one response per statement to indicate your level of satisfaction)

<table>
<thead>
<tr>
<th>Question</th>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The overall strictness of regulations placed on food trucks.</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>3.36</td>
<td>1.29</td>
</tr>
<tr>
<td>The ability to <strong>find</strong> the regulations and permitting process for food trucks.</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2.82</td>
<td>1.25</td>
</tr>
<tr>
<td>The ability to <strong>understand</strong> the regulations and permitting process for food trucks.</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2.73</td>
<td>1.35</td>
</tr>
<tr>
<td>The procedure to remit sales tax.</td>
<td>0</td>
<td>2</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>3.09</td>
<td>0.83</td>
</tr>
<tr>
<td>The annual permit fee ($218).</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>2.73</td>
<td>1.01</td>
</tr>
</tbody>
</table>

5. What is your opinion towards vending without a license? (Select one response per statement to indicate your level of agreement)

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensing is a good business practice to ensure public health and safety.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>7</td>
<td>4.64</td>
<td>0.50</td>
</tr>
<tr>
<td>If I was aware of an unlicensed vendor in the city, I would report the business.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Generally, unlicensed vendors give the food truck industry a bad reputation.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>4.36</td>
<td>0.81</td>
</tr>
<tr>
<td>Unlicensed vendors are less likely to remit sales tax.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>8</td>
<td>4.73</td>
<td>0.47</td>
</tr>
</tbody>
</table>

6. The Parks & Recreation Department requires that food trucks obtain an additional $500 annual permit to vend in Kansas City parks. Do you possess this permit? If not, why?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>100%</td>
</tr>
</tbody>
</table>

A  I can’t get licensed to vend in MO based on current regulations and the interpretation of the code by each individual inspector. We have had multiple instances of code enforcement changes based on personal code enforcement officer opinion.

B  Just don’t go there

C  Had no idea

D  Not necessary—we rarely work in the parks

E  Too expensive

F  There is not enough profit in a food truck to pay all of these secondary permits
STREETS AND SPACES

7. What qualities are important when deciding where to locate your food truck? (Select one response per item to indicate the level of importance)

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all Important</th>
<th>Very Unimportant</th>
<th>Neither Important nor Unimportant</th>
<th>Very Important</th>
<th>Extremely Important</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 High pedestrian traffic</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>4.50</td>
<td>0.85</td>
</tr>
<tr>
<td>2 High vehicle traffic</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>3.50</td>
<td>0.97</td>
</tr>
<tr>
<td>3 High parking availability for customers</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>4.00</td>
<td>0.94</td>
</tr>
<tr>
<td>4 High concentration of employment</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>4.30</td>
<td>0.87</td>
</tr>
<tr>
<td>5 Proximity to bus stops</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>2.60</td>
<td>1.07</td>
</tr>
<tr>
<td>6 Proximity to parks</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td></td>
<td>2.90</td>
<td>0.88</td>
</tr>
<tr>
<td>7 Proximity to schools</td>
<td>0</td>
<td>2</td>
<td>7</td>
<td>0</td>
<td>1</td>
<td>3.00</td>
<td>0.82</td>
</tr>
<tr>
<td>8 Proximity to residential neighborhoods</td>
<td>0</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>3.00</td>
<td>0.67</td>
</tr>
<tr>
<td>9 Proximity to office buildings</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>4.30</td>
<td>0.95</td>
</tr>
<tr>
<td>10 Proximity to shopping districts</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3.90</td>
<td>0.99</td>
</tr>
<tr>
<td>11 Proximity to entertainment/sporting districts</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>4.00</td>
<td>0.94</td>
</tr>
<tr>
<td>12 Proximity to special or temporary events</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>7</td>
<td>4.50</td>
<td>0.97</td>
</tr>
<tr>
<td>13 Proximity to storefront restaurants</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2.80</td>
<td>1.03</td>
</tr>
<tr>
<td>14 Proximity to other food trucks</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3.67</td>
<td>1.32</td>
</tr>
<tr>
<td>15 Wide sidewalks</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>3.10</td>
<td>0.99</td>
</tr>
<tr>
<td>16 Seating availability for customers</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>1</td>
<td>3.60</td>
<td>1.17</td>
</tr>
<tr>
<td>17 Shade for customers</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>1</td>
<td>3.60</td>
<td>1.17</td>
</tr>
<tr>
<td>18 Cleanliness of the area</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>4.30</td>
<td>0.95</td>
</tr>
</tbody>
</table>

8. Are there other qualities that are important that were not mentioned? If so, what qualities?

A Areas that are free of loud generators, and the smell they emit, if vending near other trucks.
B Folks that misrepresent the trucks as owners of all or the face of the food truck community. They are crooks.
C Advertising for special events.
D To clarify — the proximity to bus stop or storefronts would not necessarily be positive as this survey might indicate.
9. **What is your opinion towards parking in Kansas City, Missouri? (Select one response per statement to indicate your level of agreement)**

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is difficult to obtain permission to vend on private property.</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3.40</td>
<td>1.35</td>
</tr>
<tr>
<td>2. It is more difficult to find public parking spots than to work with private property owners to park on their lots.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>4.90</td>
<td>0.32</td>
</tr>
<tr>
<td>3. A 50-foot vending buffer from restaurants is an unreasonable distance.</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3.20</td>
<td>1.40</td>
</tr>
<tr>
<td>4. I don’t mind vending on vacant or empty parking lots as long as the customer demand is present.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>7</td>
<td>4.70</td>
<td>0.48</td>
</tr>
</tbody>
</table>

10. **Thinking about public parking time limitations, what time frame would limit you from vending at a particular location? (Select all that apply)**

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 minutes</td>
<td>6</td>
<td>60%</td>
</tr>
<tr>
<td>1 hour</td>
<td>5</td>
<td>50%</td>
</tr>
<tr>
<td>1.5 hour</td>
<td>5</td>
<td>50%</td>
</tr>
<tr>
<td>2 hours</td>
<td>5</td>
<td>50%</td>
</tr>
<tr>
<td>2.5 hours</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td>3 hours or more</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td>None of the above</td>
<td>2</td>
<td>20%</td>
</tr>
</tbody>
</table>

11. **Although currently prohibited in the following locations in Kansas City, Missouri, would you like to vend in any of these locations? (Select all that apply)**

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 50 feet of a restaurant</td>
<td>3</td>
<td>30%</td>
</tr>
<tr>
<td>Near schools on a school day</td>
<td>5</td>
<td>50%</td>
</tr>
<tr>
<td>Near the downtown Convention Center</td>
<td>9</td>
<td>90%</td>
</tr>
<tr>
<td>Near the Country Club Plaza</td>
<td>8</td>
<td>80%</td>
</tr>
<tr>
<td>None of the above</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td>Other [option to enter text]</td>
<td>3</td>
<td>30%</td>
</tr>
</tbody>
</table>

**Other:**
A. Anywhere we please
B. College campuses (UMKC)
C. Arrowhead and Kauffman Stadiums
12. Although not prohibited by regulation, are there certain streets or areas in Kansas City, Missouri where it is challenging to vend? What makes it challenging?

A All streets for lack of parking. Currently there is only 1/4 of city block designated for vendors. This is usually filled with illegally parked cars.

B In the Crossroads district and surrounding area, it is challenging to find public parking spots. Dedicated “vendors only” parking would be great—even if it is only dedicated during First Friday weekends.

C High vehicle traffic and low foot traffic, narrow streets, streets with no parking or not enough parking space. The Westport Merchant Association and other neighborhoods that have rules and regulations that make it hard for independent trucks to vend.

PUBLIC HEALTH AND SAFETY

13. What is your opinion toward health regulation? (Select one response per statement to indicate your level of agreement)

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 When applicable, trucks should be subject to the same health codes as restaurants.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>4.50</td>
<td>0.53</td>
</tr>
<tr>
<td>2 Food truck operators should be required to take a food safety certification course or provide proof related to experience/training.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>4.30</td>
<td>0.82</td>
</tr>
<tr>
<td>3 Displaying a food truck vendor license in a visible location is a good business practice.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>4.40</td>
<td>0.70</td>
</tr>
</tbody>
</table>

14. Do you provide a trash receptacle for customer use?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>10</td>
<td>100%</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

15. Do you provide a hand-washing station or sanitizer dispenser for customer use?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>4</td>
<td>40%</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>60%</td>
</tr>
</tbody>
</table>
16. In order to ensure public health, what would be a reasonable approach to health inspections? (Select one)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No inspections unless the city receives a complaint</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td>Scheduled health inspections</td>
<td>6</td>
<td>60%</td>
</tr>
<tr>
<td>Surprise health inspections</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>A combination of scheduled/surprise inspections</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td>Other:</td>
<td>1</td>
<td>10%</td>
</tr>
</tbody>
</table>

Other:
A No complaints with current methods

17. How often should a food truck be subject to health inspections? (Select one)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once every two years</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Once per year</td>
<td>5</td>
<td>56%</td>
</tr>
<tr>
<td>Twice per year</td>
<td>1</td>
<td>11%</td>
</tr>
<tr>
<td>Three times or more per year</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>The same amount of times as a restaurant</td>
<td>3</td>
<td>33%</td>
</tr>
</tbody>
</table>

FUTURE OPPORTUNITIES

18. What are your future business goals? (Select all that apply)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Launch new menu items</td>
<td>8</td>
<td>80%</td>
</tr>
<tr>
<td>Manage multiple trucks</td>
<td>3</td>
<td>30%</td>
</tr>
<tr>
<td>Move into a storefront location</td>
<td>5</td>
<td>50%</td>
</tr>
<tr>
<td>Expand or relocate to a different region</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td>Increase promotion and outreach efforts</td>
<td>6</td>
<td>60%</td>
</tr>
<tr>
<td>Participate in more community events</td>
<td>6</td>
<td>60%</td>
</tr>
<tr>
<td>Other:</td>
<td>2</td>
<td>20%</td>
</tr>
</tbody>
</table>

Other:
A Filling daily routes
B Make a profit
19. Would you be interested in any of the following opportunities? (Select all that apply)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vending near schools to provide lunch or after-school meals</td>
<td>7</td>
<td>70%</td>
</tr>
<tr>
<td>Incentives for serving food that meets specific health guidelines</td>
<td>8</td>
<td>80%</td>
</tr>
<tr>
<td>Vending on publicly-owned vacant lots</td>
<td>10</td>
<td>100%</td>
</tr>
</tbody>
</table>

20. Please provide any other comments or ideas that may be helpful in identifying barriers to your business, policy issues, or possible solutions.

A Awareness to event planners and coordinators that food trucks aren’t merely a novelty. Countless events we do there is often other food provided (sometimes free), and we weren’t told about it until. This really hurts us financially.

B Getting a business license was a little challenging because every year we’re told a different category that we belong in. With the implementation of online renewals, this is probably remedied. And getting the actual sticker for the business license shouldn’t be as time-consuming. It’s a sticker. But there never seem to be any upon renewal time. Other than that, generally we have not had issues working with KCMO. It is nice they already had guidelines in place for us to adhere to. It is very complicated to start a business because no one tells you what exact items have to be in place, or the order those things have to be done (which matters!). However, it’s since become easier to renew and keep going.

C In Kansas City Missouri, the regulations allow for the individual inspectors to make up rules as they go along. This allows for an uneven application of the rules. Also, some trucks are grandfathered and don’t have to meet the same guidelines as new trucks. For example, a truck was passed for safety with a grill attached to the back of it where the owner grilled food without a cover, yet another truck was denied a permit because it had a smoker mounted to the back with no cover over it. Inconsistent application of the rules makes for unfair competition and costs; arbitrary rules make it extremely difficult for new truck owners to build trucks that meet the laws. Also, a two-week window (of only two days per week) makes it extremely difficult to renew your license in KCMO. They need to set aside at least a month if they are not going to be available every day and they need to give priority to trucks that have already passed previously because we have ongoing business obligations that can be derailed completely outside of our control.
HEALTH DEPARTMENT

Current Dynamics
In general, what role does your office play in regulating the food truck industry? What are some of your biggest concerns with food trucks?
The city Health Department through Environmental Health Services regulates food service from pushcarts and mobile units. Our regulations monitor the food service—from the time the food was purchased, the source of the food supplies, the storage, the commissary, all the way to when it was served to the customer. We don’t deal with the location of service. The locations are regulated by Public Works and KCPD [Police Department]. Most of the time, they [the vendors] refer back to the Health Department since they have a food service permit from our office. Vendors need to have licenses from other city departments in order to get the food service permit. That’s why they usually refer to us and we point them in the correct direction.

How often would you say your office receives complaints aimed at food trucks? What is the nature of the complaints? Who issues the complaints?
The nature of the complaints just varies. We have received complaints that food didn’t taste right, or that they think they got sick from the food they ate from a push cart or mobile unit. We receive complaints through the 311 Action Center or they call our office directly. The public can use either of those methods.

Public Health and Safety
Are food trucks and restaurants subject to similar health codes? What are the differences?
They are pretty much the same—actually, temperatures are the same, when and how to wash hands, hygienic purposes, are all pretty much the same. It’s universal. But of course there are huge differences between a pushcart or mobile unit and a restaurant as far as access to hand-washing and dish-washing. That’s why we require vendors to have a commissary.

Do food trucks and restaurants have the same number of inspections?
As far as restaurants, we do inspections based on risk assessment. The restaurants are divided into four different categories—low, medium, moderate, and high risk. We do inspections at low risk at least once per year, twice for medium, three for moderate, and four for higher risk. For the mobile units and pushcarts, it’s a little different.

How often would you say you cite food truck vendors for health violations? Would you say that food trucks tend to be cited for violations more than restaurants?
Not necessarily. The chances for something to go wrong—to lose temperature on the food or run out of water—is higher [for food trucks] than for restaurants. But as far as regulations, they are pretty much the same with citations. And then with pushcarts and mobile units, we have less tolerance for such violations.

Are vendors required to have food safety training or prove past experience?
We require food handlers. Food service employees for pushcarts and mobile units must have a food handlers permit from our office.

Permitting and Enforcement
How often does your office deal with unlicensed vendors? How does the office respond?
Actually, it’s not very often. It’s complaint driven. Once we receive a complaint that an unlicensed vendor is serving at a certain location, we respond and cease operation if they turn out to be unlicensed. It’s not very often. Once they are cited for a violation, we cease operation and ask them to stop selling. We give them a warning and ask them to get into compliance and apply for the permit.
Locations
You said Public Works deals with the location aspect?
Yes, that ordinance is administered by Public Works.

Future Opportunities
Do you ever foresee the city limiting the number of permits that are issued each year?
I don’t see that happening. It’s up and down—some years we are seeing 100 mobile units permits and other years we have seen up to 180 mobile units. I can’t see any limitations at this point.

Do you see any major changes in the food truck regulations in the coming years?
We always change. And unfortunately the way the industry is going—the more types that are out there—people are becoming a little more creative. They want to add more to their menus. So there’s always changes. We are in the process of adopting the 2013 Food Code later this year, which will bring some changes with its adoption. Currently, we work with the 2005 Food Code. This year, we are hoping to have the Council pass the ordinance adopting the 2013 Code.

The modern food truck industry is considered to have boomed post-2008. Were there any major changes with your regulations after you started to notice more food truck vendors operating in the city?
Not really. I think the economy played a big factor though. After the economy, a lot of people lost their jobs but needed to find a way to support themselves with their skills.

BUSINESS CUSTOMER SERVICE CENTER (BIZCARE)
Current Dynamics
In general, what role does your office play in regulating the food truck industry? What are some of your biggest concerns with food trucks?
The very first role that my office does typically is information. So for example, as we get closer to spring, we will have people call us or just walk in and talk to us about food trucks. And we get a range of questions. We get calls from people who are considering it and haven’t bought any type of equipment yet. And we get inquiries from people who got a food truck and they want to know where they can go. What we get to is pretty much educating people on our local rules. Ideally, they’ll call us when they’re just thinking about it, and I say this for a couple of reasons. We have seen over the years, for some reason, that there is a certain population of folks that get really enthusiastic and jump into it without really checking. And we know, for example, if some person buys a truck and that truck was outfitted in some other jurisdiction, the Health Department might say it doesn’t comply with our standards. What we’d rather see is that people check with the Health Department while they’re still in the research phase. Then, the department can guide them in making sure the truck is set up correctly, with proper equipment, hand-washing stations, generator, etc.

How often would you say your office receives complaints aimed at food trucks? What is the nature of the complaints? Who issues the complaints?
Well let me think about this for a minute, scanning my memory. Historically, we had a dispute about seven to eight years ago between a restaurant owner and a food truck. That was more of a single incident. What I hear probably more often is that folks—the business associations—will contact me and say, “Hey, we are seeing more food trucks.” There’s sort of a balance that I’ve heard in some of the entertainment districts, but if it tips the scales and food trucks are taking up parking that other patrons could use—I think that is the main complaint I hear. Parking is the main one. The noisy generators being another one. To some degree the trash. If the operator is following the rules, they’re supposed to provide a trash can. But you know, with it being what it is, do people always throw stuff in the trash? No.
Permitting and Enforcement
On the other end of the spectrum, have any food truck vendors ever approached you regarding the unfairness of certain regulations? How do you respond in these situations?
We had a conversation last summer with some of the operators to see if there was any legal way to provide more dedicated parking spaces. We looked at that with Public Works and the streets and traffic folks, and I think you know that there is one area that is dedicated for parking at 13th Street between Locust and Oak. And that was worked out seven or eight years ago when we had that conflict.

Based on my conversation with the Public Works folks—so for example, one of the questions I would get is, “Can I pull a permit to reserve a parking space with a meter for two to four hours?” I’ve run that one by them, and they said no. They just don’t have the mechanism for that because, particularly in the downtown area, the parking meter parking—whether it’s one hour or two hours—is there for business patrons. That’s how their customers get access to them and then they move on. So if we say, “Okay, you can issue you a temporary permit for four hours for a food truck,” then that’s conflicting the availability of parking. So Public Works has told us that the principle purpose of public streets is for circulation—and that they are not—and it’s really not their mandate—to provide a place to do business. So what we tell people is pull into a parking space and put your money in the meter and you have however long the meter says you have. That causes some tension because they feel we could be more accommodating.

One innovative approach to that last summer, we saw a couple folks who owned a lot of property on Walnut between 12th and 11th work out an arrangement to get a temporary use permit for a parking lot. They wanted to have a mini-food truck festival. They—because it was the owners who saw some value in having some food trucks there on a nice summer day to get folks out of their offices—put something on. They actually sponsored the event that was on private property.

Do you find that vendors have difficulty finding or understanding the food truck regulations or process? What role does your office play in easing the confusion?
I think it’s fairly easily to find the regulations because we have postings on our webpage, and the Health Department has several documents on their page. I’m not saying our website is the easiest to look at, but getting the information is pretty easy. Maybe understanding it could be a little more difficult, but the folks in our Health Department are pretty good if you’re willing to contact them, to get you what you need. Maybe a little bit more of the problem is people jumping in without any research.

How often does your office deal with unlicensed vendors? How does the office respond?
We can fulfill that role if we’re asked to. I think it’s one of those things where we know that there’s some folks out there operating without the proper permits. But the nature of being a mobile vendor is that it’s hard to catch them. It doesn’t come up very often. We don’t get that many calls about unlicensed vendors. I mean, I can tell when I see them out. They are supposed to have it posted in the window in their truck. We are a little weak on enforcement. My understanding is that at the Health Department, the vendors are supposed to provide a schedule of where and when they are supposed to be, at least theoretically. So if they need to show up and do a surprise inspection, just like they would for a restaurant. So if the vendor is operating by the books, then our Health Department knows where to find them.

Locations
Are you familiar with the rationale behind some vending location restrictions?
Well, here’s what I can do. So with Article 50—whether its myself or Public Works or the Police Department—we’re all going to be looking at that same ordinance. There’s another approach to this, which is a festival permit. So for example, my understanding—and verify this with [name] in Public
Works—is that the only way to actually reserve a public street for food trucks is to close the entire street under a festival permit. And that requires permission from all the property owners. At that point, the private property owners can bring the vendors in themselves. So the temporary use permit is for parking on private property. And the festival permit allows for a street to be closed. Then the other option is to obviously find a legal parking space and just follow the rules. I would ask [name] about some of the restrictions downtown, because we’ve talked about that some. I recently met [name] and I was glad to have the information. Of course, you know the reason, for example, you don’t see food trucks around Crown Center is because Grand is a boulevard. And Pershing Road at one point is a boulevard. You can actually look at the online mapping on the website to see where all the boulevards are. My guess is [it was restricted] for an aesthetic reason. The boulevards are seen as these scenic byways. But you know that no one really remembers by the time they get to the end of the ordinances what everything is.

Is the school restriction applicable on university campuses?
In general, I think the school provision would include universities. This would not preclude a vendor securing permission from any institution to vend in or around their campus if the school saw the benefit. If a university felt a food vendor was a nuisance, they could invoke this provision and the Kansas City Police Department would have a basis to ask the vendor to leave.

Are food trucks still prohibited at the Truman Sports Complex?
I’ll send you a blog post that appeared in June of 2012. From my understanding, the Chiefs organization experimented with inviting food trucks onto their property as a way to enhance the fan experience. I am not sure if they felt this experiment was successful and if they plan to invite trucks into the sports complex in the future.

[Attachment: If you understand fine cuisine like myself then you may have noticed a growing trend—food trucks. No, really, food trucks are actually a popular thing these days. There have been food truck festivals in Kansas City and they’re growing in popularity. Those food trucks could be coming to a Kansas City Chiefs game near you. Arrowhead Stadium is hosting the Kenny Chesney/Tim McGraw concert on Saturday and Sunday night and Chiefs president Mark Donovan told the KC Business Journal that 12 local food trucks will be out in the parking lots. Kansas City Chiefs President Mark Donovan said that if the food trucks are a hit, they could return for Chiefs games. He expects thousands to show up for the concert and the tailgating event outside the arena. And for a place where tailgating is key, the new food truck court is an experiment in improving the atmosphere. Chiefs, if you’re listening, please make this happen. This would be a major plus for those on the tailgating scene who struggle at preparing their own food (like Chris, who has zero clue about barbecue since going east coast on us).]

Do you know what the process is to vend on private property?
Yes, there is a specific process. There is the temporary use permit, and that is granted by the City Planning Department. That allows for these sort of temporary events to be held on private parking lots. It’s a really simple permit to get, for a one-time event anyway. I don’t know if you know [name]. To get a recurring event permit, they had to go through an application process. They worked out a temporary permit for the Truck Stop at 20th and Wyandotte for the entire season. They got that parking lot there reserved every First Friday of the month throughout the season. And that was a little more complicated because they were going to have musicians and a bier garten, so they had to work with our regulating industries too. That would be on one end of the spectrum. And then the other end is just a single event in a parking lot—the temporary use permit takes care of that. I think for a simple one, it takes about a week. For a more complicated one, you might even want to give [name] a call and [name] can actually tell you what the intake process is.
Public Health and Safety
[no applicable questions]

Future Opportunities
Do you think the food truck industry will continue to grow in Kansas City?
Well, I’m not sure. We saw an increase this past summer, particularly around the First Friday event. There is also the National League of Cities that talks about this generally. I would encourage you to look at their website. But as far as local, I don’t know. My gut feeling is that we’ve kind of reached the peak of it, but I don’t have any statistics to back that up. I’ll probably have an intern this summer and have them run some data on it. We get all our information from the Health Department right now about the number of mobile units that are permitted. I don’t know where else they’re going to go. They really make their money out of private parties now. I got a call at one point last summer from an aggravated food truck vendor who couldn’t find a place to park. Well, there’s not much I can do about that.

Does your office play a role in assisting entrepreneurs who are trying to start a food truck business? Or vendors that are trying to expand into a storefront location?
We would definitely be able to take calls for example. I’ve sat down with our staff and people who are moving towards a single location and we make sure that they were aware of the requirements. Often times they apply, get an architect, and then think about building out a physical space. Were happy to provide general guidance there. Mostly what we do is connect people to the other folks.

POLICE DEPARTMENT
Current Dynamics
In general, what role do you play in regulating the food truck industry? What are some of your biggest concerns with food trucks?
Most law enforcement has very little interaction with food trucks, almost none at all. The primary reason I have interaction is to resolve disturbances that arise because of food trucks. Predominantly, most of those disturbances are between the food trucks—not so much between the vendors and the customers. The other equally frequent disturbance is with a business that doesn’t want a food truck near its property because they see it as taking business away.

Those are probably the top reasons we get involved with food trucks. It’s the same general reason we would get involved with any disturbance—when people disagree. Almost no police officer gets involved with licensing. The only reason I get involved with that in the entertainment district is to issue violations if a food truck is not behaving in an appropriate way. And the reason I say that is because the laws the food truck vendors have to follow—the licensing—it’s typically with the regulating industry. The Police Department doesn’t have the resources, nor do we go out of our way to ensure compliance. Now when we get involved with one of those disturbances that I mentioned, we may ask to see their license, but it’s not a general practice. We’re not the primary enforcement of that.

How often would you say you hear complaints aimed at food trucks? What is the nature of the complaints? Who issues the complaints?
I’ve worked the Westport District and entertainment districts, but generally they [food trucks] are parking in a place they aren’t supposed to park—because most parking is designated for cars or taxis or whatever. So it’s a general complaint that they are parking where they are not supposed to. And it’s the businesses that these food trucks park in front of, for a large part. If you have a restaurant and a food truck is parked right in front, they think that runs down on their business—theoretically. So it’s an economic thing.
On the other end of the spectrum, have any food truck vendors ever approached you regarding the unfairness of certain regulations? How do you respond in these situations?
Oh yes, they complain about stuff. Especially about the developer agreements—the exclusion zones—they complain about that. They complain about each other as much as they complain about that. You have to get the prime spot. It’s even gotten to the point of staying there overnight to get a spot, “Well we just want to get a high quality food crowd.” There’s a guy in a sleeping bag in a trailer. And we go, “No, no no, we’re not camping out.” Some of them will sit in a parking lot in a van all night to block their spot or whatever.

To the extreme, and we can’t prove this, but we’re pretty sure one of them called in a bomb threat on the other. That was not funny. We get a guy who sells bottled water out of a cooler for 50 cents. That’s all he’s got—literally a cooler with water. But he’s properly licensed and everything. So the hot dog guy doesn’t like this guy because he’s right next to him, and the hot dog guy sells his bottled water for a dollar. So the way this crowd and people flow out of a parking garage, they always get to the cooler before the cart. So he’s always undercutting their business. Well they don’t like that—and one time the guy walks off for a bit and left the water cooler there with his bag. And somebody called in a bomb threat with a suspicious bag. There’s the FBI, the bomb squad, the robots, closing down the block in all directions—not something we should take a chance on. I know the hot dog guy did get interviewed by the FBI, so hopefully he learned his lesson if he did it. We never proved it, but there were some accents that gave him away. And we know about the history. That’s the extreme case.

Permitting and Enforcement
Do you think that vendors are unaware of the regulations? Are there repeat offenders?
Typically, in my experience—where I’m at—it’s the ongoing disputes with each other at certain locations. The food truck industry is a fairly close group—they all know each other. There’s only so many food trucks. It seems to be that most of the discussions result from ongoing disputes about vending spots. I will say, there seems to be, in my mind, a distinction between what you’d call a hot dog cart versus high-end food trucks. The food truck world in Kansas City—there are some fairly well-known chefs and restaurants that have food trucks that are very high end. I don’t see that kind of drama with them. The food trucks that are down for First Fridays and your hot dog stands are different. And it comes down to who owns those people—the higher profile. Who you’re dealing with—it’s a difference between going into a four-star restaurant and a taco bell, right? The hot dog cart vendors are a whole different character and kind of person, and they are more prone to some “he-said-she-said” drama.

What other concerns do you have with enforcement?
I will say—it fits under the bad behavior category—some of the lower-end carts have potential environmental disasters. These guys are pouring grease down the sewer! It causes a mess on the street and the sidewalks. I got on them—caught them doing it one time. It was pretty evident with the grease stains. I don’t believe that your high-end trucks do that kind of stuff. You take a low-end, say a smaller hot dog cart, there is a whole laundry list of problems they cause—sleeping in sleeping bags on the street, fighting with other vendors for position, pouring grease down the drains, blocking the sidewalk, and being super aggressive in trying to drum up business. Just generally annoying sometimes, so that’s probably why I’ve been involved with them so much. Between the hot dog carts and the scalpers, we can get pretty busy down there [Power & Light District]. But generally it’s not something law enforcement deals with. But since we’re the only ones out there, we will turn these guys into the regulating industries.

How often do you deal with unlicensed vendors? What do you do in these situations?
When these guys have ongoing feuds with each other, they will absolutely rat each other out for not
being properly licensed. I’ve worked First Fridays down in the West Bottoms—and this came up a couple months ago. One said, “Hey, that cart’s not licensed properly and that’s not fair because I had to buy a license.” So it’s about economic competition, of course. The more food trucks, the less profit you might make as an individual owner. I was a little surprised by the people he was going after. They own a very reputable restaurant, and it turns out the guy’s uncle was in the hospital and the kids were the ones out running it, and they didn’t have the permit on them. And then I did ask to see the permits and was going to shut them down in that case. Well, we gave them a reasonable amount of time to get the permits there, and they didn’t. So they voluntarily moved on and problem solved.

**Locations**

*Are you familiar with the rationale behind some vending location restrictions?*

The city has some local ordinances. There’s a developer agreement down there for the city agreeing to a mortgage, such as with Power & Light. The developer agreement actually allows the district to operate the vending on the sidewalks in the Power & Light District. It’s called an exclusion zone. And the reason for that is because Kansas City taxpayers subsidize the shortfalls in the Power & Light District. If they don’t make “x” amount of dollars every year, then it comes out of the city coffers to pick that up. So it’s in everybody’s interest if food truck vendors aren’t there. Everybody [food trucks] complains that they are just doing it for the quality issues and concerns. I believe there are five exclusion zones, but I’m not particularly sure what they all are.

*Do you think public parking poses a big issue for vendors? What are the time limits downtown?*

The majority of the limits downtown are two hours. Generally, we tend to turn a blind eye, particularly after enforcement hours, for any car. Most of the food trucks I’ve dealt with in the evenings, it’s when somebody didn’t feed the meter. And another food truck vendor will complain because they want that spot. That’s why I probably have the most experience dealing with food truck wars. These guys get mad at each other, businesses get mad because they don’t follow the exclusion zone on Grand. They were blocking the sidewalk and pedestrian traffic—that was a huge issue for one. Everybody’s pretty happy with 13th and Walnut. Probably some of them are parked illegally, but again we don’t go out of our way to hassle these guys. Everybody wants everybody to be happy.

There’s going to be a huge problem, especially in Power & Light, with the light rail going in. They’re going to tear up the streets, and that came up in a meeting earlier this month—a bunch of people get together to talk about the downtown streets. I wonder where the food trucks are going to go when they start construction, because there literally won’t be any place for them to go—so we’ll see. And they’re all private businesses, but the only reason we brought it up is because we know they will go somewhere—probably somewhere less desirable. So we anticipate having some more issues.

**Public Health and Safety**

*[no applicable questions]*

**Future Opportunities**

*Do you think the food truck industry will continue to grow in Kansas City?*

I think it’ll grow a little bit more. I think they’re getting close to market saturation, but I don’t think they’re done growing yet. I think there’s still room for it. The biggest problem you have, honestly, with the food truck industry is it’s a mobile thing that has to set up some place. And there’s no place to set them up necessarily. The First Friday down in the Crossroads, they have a parking lot over by the Kansas City Star—and they all park over there. It’s widely popular, I mean huge lines! It’s very successful when they plan for food trucks. The problem with the Power & Light and Westport Districts is that they never plan for
food trucks, and quite honestly they don’t want them detracting from their business. Where at an event like First Friday, in the Crossroads, you’re dealing with the art galleries who don’t supply food. So they’re interested in food trucks adding to the event. So I don’t think we’re necessarily done with food trucks yet, but I will say there’s an awful lot of them now.

Do you think there will be any major changes to the food truck regulations in the coming years?
No, I think the big one—and it’s the biggest one I’ve seen in twenty years doing enforcement—was the exclusion zones. That was the most significant piece of legislation, and honestly the only one I can recall that passed.

PUBLIC WORKS DEPARTMENT
The individual was not interested in participating in a phone interview, but responded via e-mail.
I copied parts of Section 30 of our code of ordinances. Our code of ordinances can be viewed online at kcmo.org. The only time the traffic permits section gets involved with food truck vendors is when they are invited as a part of a festival by the festival permitee. Our department basically does not get involved with permitee’s decision on which vendors they do or don’t invite. Some festivals have no food vendors at all.

Sec. 30-73. Permits.
Section 8-301.11 of the 2005 Food Code is amended to read as follows: A person may not operate a food establishment without a valid permit to operate issued by the regulatory authority. A permit is required to apply for and obtain and pay for a separate food establishment permit for each of the types of food establishment operations listed in subsections (1) through (12):

(3) Mobile Food Service Permit: issued to a vehicle-mounted restaurant type establishment designed to be readily movable.

(6) Temporary Food Service Establishment Permit: issued to a restaurant type establishment that operates at a fixed location for a period of time of not more than 14 consecutive days in conjunction with a single event or celebration. Those establishments whose principle mode of business is not the sale of food or beverages who in conjunction with their special event occasionally offer non-potentially hazardous foods such as pretzels and peanuts free of charge to their clientele no more frequently than once per month are exempt from obtaining a temporary permit. All food served shall be obtained from sources that comply with all laws that relating to food and food labeling.

Sec. 30-74. Penalties.
Section 8-811.10 of the 2005 Food Code is amended to read as follows:
(a) The regulatory authority may seek to enforce the provisions of this Code and its orders by instituting proceedings as provided in LAW against the permit holder or other persons who violate its provisions.

(b) Any person who violates a provision of this Code may be punished by a fine of not more than $500.00, or by imprisonment not exceeding six months, or both such fine and imprisonment. Each day on which a violation occurs is a separate violation under this section.

Sec. 30-75. Fees.
(a) Director’s authority. The director is authorized to charge for the actual cost of providing the Food Code Book to any user and the actual cost of providing any food protection education classes and food handler and/or manager cards.
(b) Fee schedule. All fees shall be paid in accordance with the fee schedule contained in this subsection (b). Restaurant type establishments shall pay fees based on the number of its employees and market type establishments shall pay fees based on the total square footage of the market type operation within the building. The appropriate fee shall be determined on the date of the application. Temporary food service establishments shall pay fees based on the number of days of operation and each temporary food service establishment at any given event or location is required to obtain and pay for a permit in the amount required by the fee schedule of this subsection (b) prior to beginning operation. Truck sales vendor, mobile food service/pushcart and ice cream vendor shall pay the fees in the fee schedule that correspond to truck sales vendor, mobile food service/pushcart and ice cream vendor for each vehicle operated. Catering and seasonal vendor permit holders shall pay the fees in the fee schedule that correspond to catering and seasonal vendor permits.

Annual permits. All permits are annual permits and shall be valid from January 1 through December 31, except for temporary food service permits and seasonal vendor permits. All persons who operate a restaurant type establishment, market type establishment, mobile food service or pushcart or as a truck sales vendor or ice cream vendor shall obtain and pay for an annual permit in the amount required by the fee schedule of this subsection (B) prior to beginning operation. All persons are required to obtain an annual permit for each type of operation as defined in subsection (A) of this section and if a location has multiple operations or more than one type of operation, a permit must be obtained and paid for each operation in the amount required by the fee schedule of this subsection (B) prior to beginning operation. Any person who operates as a truck sales vendor, catering, ice cream vendor, mobile food service or pushcart vendor shall obtain and pay for an annual permit for each vehicle in the amount required by the fee schedule of this subsection (B) prior to beginning operation. If a location has multiple food establishments or types of food establishments as specified in subsections (1) through (12), the person must apply, obtain and pay for a separate permit for each operation.

(2) Plan review fees. When a person is required to submit plans for the construction, conversion or remodeling of any food establishment as defined by the Kansas City Missouri Food Code to the health department for review as specified under section 8-201.11 of the Kansas City Missouri Food Code, the person shall pay a plan review fee in the amount set forth in the fee schedule of this subsection (B).

(4) Processing fee for initial permit and change in ownership. If a person is applying for an initial permit or new permit due to a change in ownership for a restaurant type establishment, market type
establishment or truck sales vendor, the person shall pay a processing fee of $100.00 per permit. If a person is applying for an initial permit or a new permit due to a change in ownership for a mobile unit or push cart, catering or ice cream vendor establishment, the person shall pay a processing fee of $50.00 per permit. The processing fee is in addition to all other fees.

(5) Initial permit fees. If an application is for an initial permit, the person shall estimate the number of employees who will be working at the food establishment or the square footage. If the estimate is inaccurate, the permit holder shall amend the application and pay the appropriate fee. In the event an initial permit application is filed to begin operation anytime during the period of October 1 through December 31 for a restaurant type or market type establishment, the permit fee shall be 25 percent of the annual fee.

(6) Reinstatement fees. For food establishments that have had a permit suspended following action taken in accordance with 8-804.10 through 8-804.50 (C), a processing fee in the amount of $100 will be assessed in order to process the reinstatement application and reinstate the permit.

(7) Late Fee. PERMIT renewals not submitted to the Health Department by January 31 will be charged a $50.00 per month late fee. Establishments that have not paid the appropriate fee by February 1 may be subject to a cease operation until all fees have been paid.

(8) Exemption. No charge shall be made for issuance of a permit, license or certificate to a food service establishment operated by a public tax supported entity, such as a public school district.

(c) The Director of Health shall have the authority to annually adjust all fees in subsection (b) to reflect an increase equal to an increase in the consumer price index all items/all urban consumers/Kansas City, Missouri-Kansas) published by the United States Department of Labor, Bureau of Labor Statistics if the fees imposed in subsection (b) will not cover the cost of the city’s food protection program. The authorization for the Director of Health to annually increase fees to cover the costs of the food protection program shall be cumulative and the failure of the City to raise fees in any one year shall not waive the Director of Health’s authority to cumulatively raise fees by the consumer price index for missed years as long as the funds are used to fund the City’s cost of the food protection program. The adjustments, if made, shall be made annually by the Director of Health in connection with the adoption of the annual budget of the City by filing a notice with the city clerk.
### [Table F.1] Permit Cost
The permit cost for a food truck that is allowed to cook and serve from a mobile unit.  
(District of Columbia, 2014a; City of Chicago, 2014a; City of Austin, 2014a; Multnomah County, 2014)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>$300 annual fee; $600 annual fee for a sidewalk permit (68 square miles)</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>$1,000 two-year fee (235 square miles)</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>$210 annual fee (271 square miles)</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>$425 annual fee (145 square miles)</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>$218 annual fee (319 square miles)</td>
</tr>
</tbody>
</table>

### [Table F.2] Business License Renewal Process
The process to renew business licenses prior to the expiration of the document.  
(District of Columbia; 2014a; City of Chicago, 2014a; City of Austin, 2014b; City of Portland, 2014a)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>45-day period prior to expiration of the license</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>Intake from 8:30 a.m. to 3:30 p.m. but appointments recommended</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>45-day period prior to expiration of the license; intake on Tuesday and Thursday mornings on a first-come first-serve basis</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>Renewals available November 1st through December 31st, prior to license expirations on December 31st at midnight</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>None</td>
</tr>
</tbody>
</table>

### [Table F.3] Information and Support
Access to and assistance comprehending food truck policies and permitting processes.  
(District of Columbia, 2014b; City of Chicago, 2014b; City of Austin, 2014b; City of Portland, 2014b)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>Office of Planning sponsors the DC Food Forum and lists the Department of Small and Local Business Development as a resource</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>Suggest scheduling an appointment with a Business Consultant for a free assessment and consultation</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>Environmental Health Services Division publishes a FoodWise newsletter each quarter and hosts monthly presentations to assist vendors; eight-page Starting a Food Business guidebook</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>Entire city webpage dedicated to food carts; thirteen-page Sidewalk Vending Cart guidebook</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>Generic Business Resource Guide available online; one-page list of guidelines for vendors</td>
</tr>
</tbody>
</table>
### Table F.4 Unlicensed Vendors and Enforcement

The means of enforcing non-health regulations.

(District of Columbia, 2014a; City of Chicago, 2014a; City of Austin, 2014a; City of Portland, 2014a)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>Revocation or suspension of a permit if the vendor has committed the same violation six or more times in a continuous twelve month period</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>Violation is punished by a fine no less than $1,000 and not more than $2,000; each day that a violation occurs is a separate offense</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>None</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>Violation is punished by a fine not exceeding $500 or by imprisonment not exceeding six months, or both</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>Violation is punished by a fine not exceeding $500 or by imprisonment not exceeding 180 days, or both</td>
</tr>
</tbody>
</table>

### Table F.5 Restaurant Buffers

The required distance food trucks must be from restaurant establishments.

(District of Columbia, 2014a; City of Chicago, 2014a; City of Austin, 2014a; City of Portland, 2014a)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>200-foot buffer from establishments or another designated vending locations; recently removed a 500-foot buffer</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>200-foot buffer from any public entrance</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>20-foot buffer</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>100-foot buffer, including farmer’s markets</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>50-foot buffer from any public entrance</td>
</tr>
</tbody>
</table>

### Table F.6 School Buffer

The required distance food trucks must be from schools.

(District of Columbia, 2014a; City of Chicago, 2014; City of Austin, 2014a)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>100-foot buffer from the main entrance of a primary or secondary school while in session; minimum distance may be increased upon request of the school</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>None (previously a 200-foot buffer from a school while in session)</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>University of Texas campuses have separate permitting process that do not involve the city</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>None</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>One-block buffer from any school while in session</td>
</tr>
</tbody>
</table>
### [Table F.7] Park Restrictions

Restrictions in city, state, or national parks.  
(District of Columbia, 2014a; City of Chicago, 2014a; City of Austin, 2014a; City of Portland, 2014c)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>$125 monthly permit fee for designated locations in the National Park Vending Zone</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>None</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>Single-day permits administrated by the Parks and Recreation Department</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>Variable-cost monthly permits administered by the Parks and Recreation Department depending on park designation (Type A: $400-600, Type B: $250, Type C: $150)</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>$500 annual permit for one authorized park administered by the Parks and Recreation Department; allowances for permit reductions or “roaming permits” granted under “healthy vending” requirements</td>
</tr>
</tbody>
</table>

### [Table F.8] Street Restrictions

Restrictions applicable to specific streets or streets in general.  
(District of Columbia, 2014a; City of Chicago, 2014a; City of Austin, 2014a; Goad, 2013)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>Recently removed the “ice-cream truck” rule that mandated potential customers must form a queue before a food truck may stop to serve food; no more than three designated locations on any side of a city block</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>Lists downtown restricted areas street by street (some with certain time limitations) in order to avoid traffic congestion; no vending adjacent to a protected bike lane</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>None</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>Considering removing restrictions that prohibit “clustering of food trucks” on public and/or private property; many vendors violate the ordinance, which is not heavily enforced, to host First Friday food truck events</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>Prohibited on streets designated as trafficways, boulevards, or parkways</td>
</tr>
</tbody>
</table>
### [Table F.9] District Restrictions

Restrictions in designated districts or areas.
(District of Columbia, 2014a; City of Chicago, 2014a; City of Austin, 2014a; City of Portland, 2014a)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>Vending is approved in designated locations in four vending zones (Central zone, Neighborhood zone, Old Georgetown zone, National Park zone); proposed vending locations may be submitted to the city for consideration</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>None</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>Permitted in all commercial and industrial zoning districts; prohibited in all residential zoning districts and within 50 feet of buildings that contain both residential and commercial uses</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>Allowed within commercial zones; allowed within residential districts for a maximum of ten-minutes per block</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>Prohibited within the Convention Center area, Power &amp; Light District, the Truman Sports Complex, and the Country Club Plaza</td>
</tr>
</tbody>
</table>

### [Table F.10] Time Limits

City-wide vending time limits and public parking time limits.
(District of Columbia, 2014a; City of Chicago, 2014; City of Austin, 2014a; City of Portland, 2014a)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>4-hour limit; Sunday-Thursday from 5:00 a.m. to 10:00 p.m. and Friday-Saturday from 5:00 a.m. to 10:00 p.m.</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>2-hour limit or the maximum permitted limit for parking, whichever is lesser</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>If at one location for more than two hours, must have permission from a business within 150 feet for food truck employees to use the restroom; may not operate from 3:00 a.m. to 6:00 a.m.</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>Public parking spots are primarily limited to 2-hour limits; may not operate from 12:00 a.m. to 6:00 a.m.</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>None</td>
</tr>
</tbody>
</table>
**[Table F.11] Vending on Private Property**
Restrictions and processes to vend on private property.
(City of Chicago, 2014a; City of Austin, 2014a; City of Portland, 2014a)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>None</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>Written consent from the owner or lessee of the property (2-hour limit)</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>Restrictions do not apply on private property for three hours or less</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>Written consent of the property owner; recently removed a permit cost associated with vending on private property</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>Obtain and display a vendor certificate</td>
</tr>
</tbody>
</table>

**[Table F.12] Vending on Vacant Lots**
Restrictions and processes to vend on vacant or underdeveloped lots.
(District of Columbia, 2014c; City of Chicago, 2014a; City of Austin, 2014a; Goad, 2013)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
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<tbody>
<tr>
<td>Washington D.C.</td>
<td>Office of Planning’s <em>Temporary Urban Initiative</em> seeks to transform vacant spaces into vibrant destinations</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>Prohibited on privately-owned vacant lots</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>Encourages food truck clusters as interim uses on private property</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>City is investigating additional city property (i.e. parking lots, open lots) that could be leased to food trucks to promote activity</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>No restrictions for privately-owned vacant lots; no mechanism to vend on publicly-owned vacant lots</td>
</tr>
</tbody>
</table>

**[Table F.13] Certification Requirements**
Food safety and related requirement for operators and handlers.
(District of Columbia, 2014a; City of Chicago, 2014a; City of Austin, 2014a; Multnomah County, 2014)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>Food Protection Manager certificate required</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>Food Sanitation Manager certificate required; completed consultation with a Business Consultant to review business practices</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>Food Manager certificate required; any persons employed at a food enterprise shall register as a Food Handler</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>Food Handlers required; tests available online or at the city office</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>Food Truck Operations Manager must be present at all times; if no manager is certified, 80 percent of the staff must obtain three-year Food Handler permits</td>
</tr>
</tbody>
</table>
### Table F.14 Trash and Cleanliness
Requirements related to trash receptacles and the cleanliness of urban spaces.
(District of Columbia, 2014a; City of Chicago, 2014a; City of Austin, 2014a; City of Portland, 2014a)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>Required to affix a trash receptacle to the stand or vehicle; must keep sidewalks, roadways, and public spaces adjacent to their vending space clean of litter</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>Trash receptacle required</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>Trash receptacle required</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>Trash receptacle required; must keep 24 square-foot area surrounding their vending location clean</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>Trash receptacle required</td>
</tr>
</tbody>
</table>

### Table F.15 Type and Frequency of Inspections
The types and frequencies of health inspections.
(District of Columbia, 2014a; City of Chicago, 2014a; City of Austin, 2014a; Multnomah County, 2014)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>Every six months at designated location</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>Inspection at commissary facility; unspecified intervals</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>Annually at designated location</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>Annually at designated location</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>Annually at commissary facility</td>
</tr>
</tbody>
</table>

### Table F.16 Consistency of Enforcement
Policies and structures in place to ensure consistent health code enforcement.
(City of Chicago, 2014b; Castillo, 2010; City of Austin, 2014a; Multnomah County, 2014)

<table>
<thead>
<tr>
<th>City</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington D.C.</td>
<td>None</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>Free <em>Mobile Food Vehicle Assessments</em> prior to submitting an application</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>One inspector devoted full-time to mobile vendors; city recently approved three new positions to work with mobile vendors</td>
</tr>
<tr>
<td>Portland, OR</td>
<td>Vendors must cease operations if a priority item is violated and cannot be remedied immediately; vendors are given a fourteen-day period to correct the issue before revocation of permits</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>None</td>
</tr>
</tbody>
</table>