Collaborative governance design in local food systems in the United States

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ABSTRACT

Food policy councils, which convene diverse stakeholders in local food policymaking and implementation, are increasingly recognized for the prominent role they play in food system governance. Yet little attention has been given to systematically identifying who participates in councils, why councils are established, what topics councils are expected to address, and how they are expected to address these topics as indicated in the formal mandates that govern them. This study addresses this limitation by offering a systematic description of the design of publicly mandated food policy councils operating at the municipal-level in the United States. It contributes understanding regarding (1) council membership, (2) the contexts in which councils are established, (3) the topical foci of councils, and (4) mandated and authorized policy activities. This study yields valuable insights for scholars and practitioners interested in understanding stakeholder representation within councils, as well as the authority and responsibility vested in them.

1. Introduction

Local communities are increasingly using food policy councils (FPCs) to shape local food systems. FPCs are collaborative governance arrangements insofar as they convene stakeholders across sectors (e.g., government, business, non-profits, and community-at-large) to collectively address food system issues, such as hunger, equitable food access, and sustainable food production, (Bassarab et al. 2019). The growth of FPCs in the United States over the last 10 years—from 69 FPCs in 2010 to 253 in 2020 (Johns Hopkins FPC Data 2020)—indicates a growing recognition that FPCs may serve as valuable mechanisms for food system governance. While previous work has acknowledged the specific aims, goals, and actions of FPCs (Bassarab et al. 2019; Harper et al. 2009), complementary work assessing how their governing policies assign goals and...
actions is limited (Siddiki et al. 2015). FPC mandates identify intended participants and define their activities and outputs. Thus, understanding their governing policies is foundational to the studying FPCs.

Food system governance is an important issue for municipal governments, yet food policies in the United States are often promulgated at the state- and federal-level (Feenstra 1997), with urban municipal policies being more concerned with other “more urban” problems (Pothukuchi and Kaufman 1999). Yet, the interconnectivity between food and other “urban” issues such as hunger, health, poverty, waste/recycling, and justice is increasingly identified (Bassarab et al. 2019; Harper et al. 2009; Mendes 2008).

While scholars, practitioners, and community advocates promote an intersectional food policy view, the lack of a single, responsible department for food policy is seen as a considerable challenge (Santo, Yong, and Palmer 2014; Harper et al. 2009). For example, policies relating to nutrition are often implemented by public health departments, food waste by sanitation departments, and food-related business by economic development departments. In this siloed ecosystem, policies are often dispersed across government agencies, compartmentalized in their aims, and inaccessible to citizens (Harper et al. 2009; Pothukuchi and Kaufman 1999).

Given the growing appetite for local food policy and the coordination gap within municipal governments, FPCs are viewed as a tool for addressing these challenges by (1) serving as a community forum, (2) fostering cross-sector food system coordination, (3) designing and evaluating policy, and (4) launching and supporting programs (Harper et al. 2009). These four functions are seen as fundamental to addressing the food policy coordination gap, while also promoting participatory decision-making (Gupta et al. 2018) which is why FPCs are promoted to address inefficiencies and inequities observed in the local food system (Bassarab et al. 2019; Morgan and Santo 2018; Feenstra 1997).

FPCs have been characterized as collaborative governance arrangements (Siddiki et al. 2015), since they convene individuals representing the diverse local food system to advocate personal or organizational policy priorities (Siddiki et al. 2015). They bring together government and other actors to jointly work through food system opportunities and challenges (Harper et al. 2009) and are designed to draw on diverse forms of knowledge and resources (Harper et al. 2009; Mendes 2008; Schiff 2008). While the FPC model is founded on diverse stakeholder participation, it is important to understand which stakeholders are included in FPCs and who is given authority.

FPCs can vary considerably in their organizational form. Scholars have mainly bifurcated the organizational forms of FPCs between those embedded in government and those that are not. This bifurcation is argued to offer important tradeoffs, such as financial resources and autonomy (Gupta et al. 2018).

To date, limited attention is given to the governing documents describing the composition, goals, and activities of FPCs (Siddiki et al. 2015). While the organizational form of FPCs can signal general expectations regarding resource access and autonomy, evaluating FPCs’ governing documents offers insights into the permissions, guidance, and requirements meant to shape FPC actions. Evaluating governing documents can contribute to a growing body of interdisciplinary literature seeking to understand the role of FPCs in the
larger food policy environment. This research contributes to this literature by examining public policies establishing and governing FPCs to provide insight on who is a part of FPCs, why FPCs are established, what topics they address, and how they do so.

2. Methodology

2.1. Sample selection and data collection

This study focuses on active, publicly mandated, municipal-level FPCs which were identified through the Johns Hopkins’ Center for a Livable Future’s Food Policy Networks’ online database (Johns Hopkins FPC Data 2020) (hereinafter the “database”). At the time of sampling (summer 2020), the database listed 307 councils, of which 51 (16.6%) were publicly mandated, including 15 that were mandated at the municipal-level of which 5 were jointly mandated at both the municipal- and county-level. All 15 FPCs were included in this study. The sampling strategy was supplemented in two ways. First, we compared the sample obtained from the database to 18 FPCs previously identified by a coauthor in another study (Siddiki et al. 2015). This revealed three additional FPCs meeting our inclusion criteria that were missing from the database; none of which were still active. Second, we conducted an extensive online search which rendered no additional FPCs.

The 15 municipal-level, public FPCs included in our study represent 4.9% of the councils in the database. There are two reasons to focus on this subgroup. First, given their public constitution, each of these FPCs has a governing mandate conveying goals, activities, and participant inclusion. Second, these FPCs are expected to serve similar roles since municipalities often lack specific food and/or agricultural departments leading to comparable policy environments and designs in their mandates.

Three types of data were collected:

(1) Demographic and health data related to the specific cities in which the councils are embedded. These data are suggestive of broader municipal-level contexts often associated with the work of the councils and offer insight into the motivation leading to FPC creation. Demographic characteristics were measured through population counts and percentage poverty data retrieved from the U.S. Census Bureau (2018a). Health data includes the percentage of residents living in food deserts and the percentage of the population identified as obese, which were retrieved from the Food Access Research Atlas (U.S. Census Bureau 2018b). Note: Food desert and obesity data were not available for Lawrence, Kansas and Fort Scott, Kansas, as their data are only reported at the county-level. USDA-ERS defines the percentage of the population living in a food desert as the percentage of the population living more than 1/2 mile for urban areas and 10 miles for rural areas from the nearest supermarket, supercenter, or large grocery store (U.S. Census Bureau 2018b). Additionally, obesity is defined by the U.S. Centers for Disease Control and Prevention as anyone over the age of 18 with a body mass index (BMI) greater than 30 (CDC 2020). While BMI—a ratio of one’s weight in kilograms divided by one’s height in meters squared—is often criticized as overly simplistic, higher BMI values are associated with increased risk of high blood pressure, coronary heart disease, and lower quality of life, making it an important measure for public health (CDC 2020).
(2) Presence of additional food policy councils. To better understand the broader food system governance context, the database was consulted to identify whether additional councils were present within the county/region or state of the study FPCs. The presence of additional FPCs may signal particular political and/or resource contexts for FPCs, which may have bearing on how FPCs are designed and what they can do.

(3) Public policies mandating municipal councils were collected from city websites or third-party sources (e.g., municode) and then subsequently coded according to study objectives. Each of the 15 FPCs are mandated by a single policy outlined in Table 1 (see Appendix A for digital links). For the remainder of the paper, the formal documents giving authority to FPCs will be referred to as mandates and all FPCs will be identified by their city name.

### 2.2. Coding policy mandates

The FPC mandates were first parsed into statements defined here as individual sentences. Each statement was then classified as one of four statement types: membership, context, goal, or action. **Membership statements** identify who is included in the council, the number...
of members, the member appointment process, and member term lengths/limits. Context statements identify the context into which the FPC are being established or the reason why the FPC is being established by describing the local food system. They also include hortatory statements about municipalities’ food system values and definitions of mandate-relevant terms. Goal statements define what the FPC should be addressing. These statements outline the general goals of the council, such as overarching aims of promoting food access or improving community dietary habits. In contrast to goal statements, action statements delegate specific required, permitted, or prohibited tasks or actions to the council expressing how the council should engage with food system topics. Table 2 describes the different statement types and provides illustrative examples from the mandates.

Statement types were assigned based on the specific information conveyed within each statement. First, the number of council members, the appointment process, and term lengths/limits were recorded from the FPCs’ membership statements.

Second, all context, goal, and action statements across mandates were coded based on a topic codebook encompassing common topics discussed in the FPC literature (Bassarab et al. 2019; Harper et al. 2009) and inductively modified based on themes and patterns seen within the mandates. The final list of local food system topics included (1) food waste and compost, (2) affordability, (3) diet-related disease and nutrition, (4) hunger and food access, (5) justice and equity, (6) land use and biodiversity, (7) food production, (8) sustainability and environment, (9) retail and economic opportunity, and (10) culture and tradition.

Third, the action statements were coded to determine the specific action available to the FPC. The actions codebook was developed based on the policy actions outlined in the FPC literature (Siddiki et al. 2015) and inductively modified based on themes and patterns observed within the mandates. Actions were coded along the following categories:

- **Advise**: Advising another government body, organization, or group without any specific reference to policy drafting or recommendations
- **Design**: Drafting or recommending specific policy language
- **Coordinate**: Organizing and coordinating activities across government units, stakeholders, and/or community members
- **Implement**: Participating in or offering specific guidance on the implementation of government programs or policies
- **Research**: Participating in policy research or data collection
- **Evaluate**: Participating in policy or program review or outcome tracking
- **Report**: Providing mandatory reporting criteria to either another government body or to the community-at-large

Some statements reference multiple topics or actions, and this was reflected in the coding. For example, the following action statement from Minneapolis was coded as topically addressing food production, diet-related disease and nutrition, and sustainability and environment. Based on the action codebook, the statement was also coded to design (i.e. “develop innovative policies and strategies”).
| Statement type | General description | Specific definition | Example statement |
|---------------|---------------------|---------------------|-------------------|
| Membership    | Statements identifying *who* is a part of the FPC | Statements that outline the number of council members, their appointment process, and term length | WHEREAS, The DFPC shall have 21 seats drawn from various sectors, as stated in the Policy, including a seat appointed by the Detroit City Council and a seat appointed by the Mayor of the City of Detroit (Detroit, MI). In addition, the Board may appoint as voting members of the Task Force up to seven representatives of community-based organizations that provide nutritional support and increase the food security of San Francisco residents. (San Francisco, CA) |
| Context       | Statements giving context as to *why* the FPC is established | Discuss/describe local food system context | WHEREAS, In the City of New Orleans prior to Hurricane Katrina, access to fresh healthy foods had been an ongoing challenge for residents; and WHEREAS, food availability has worsened since Hurricane Katrina with only a limited number of supermarkets open; and (New Orleans, LA) |
| Hortatory     | Hortatory statements about the city’s food system values | Definitions of key concepts | Austin is a responsive community with limitless possibilities so there is no excuse for hunger (Austin, TX) |
| Goal          | Statements outlining *what* topics the FPC should be addressing | Outline general goals of the FPC for a given topic (e.g. food access, food production) | The FPC seeks to support a successful, sustainable local food system in Lawrence and Douglas County. (Lawrence, KS) |
| Action        | Statements outlining specific actions as to *how* the FPC should address a given topic | Outline specific tasks or actions (e.g. advise, coordinate, and research) to be taken by the FPC for a given topic | City agencies and employees providing food or the financial means of obtaining food shall plan, execute and evaluate such programs and actions in order to achieve maximum efficiency in providing food and to assure that such programs are reaching the residents in need of them. (Hartford, CT) |

Note: Bolded and italicized text emphasizes the who, why, what, and how framing of the paper with respect to the general descriptions of each statement type.
The purpose of the Homegrown Minneapolis Food Council is to develop innovative policies and strategies to improve the growing of healthy, sustainable, locally grown foods in Minneapolis. (Minneapolis)

This facilitated the discovery of patterns across FPC mandates and established common clusters between different topics or co-occurrences between topics and actions. Thus, the analysis examines which topics and actions are included most frequently in mandates, and the patterns within and across topics and actions.

3. Results

3.1. Policy contexts of sample cities

Figure 1 identifies the 15 FPCs and the related contextual city and food system metrics. It demonstrates two general contextual dynamics: the city’s population size and the percentage of city residents living in poverty. While the specific influence a city’s population has on the food system is difficult to define, the population composition is expected to influence a city’s tax base and its concomitant ability to access resources to address food system opportunities and challenges. In our sample, there is a two-magnitude difference between the population of the smallest city, Fort Scott (population: 7697), and the two largest cities, San Francisco (population: 881,549) and Austin (population: 978,908) (U.S. Census Bureau 2018a). While this range outlines the diverse contextual settings in which publicly mandated FPCs are being established, Fort Scott is an outlier. The second smallest city is Lawrence (population: 98,193) and the median population is Saint Paul (population: 308,096).

Furthermore, the percentage of city residents living in poverty offers additional contextual insights into common FPC challenges, as a proxy related to hunger, food access, and affordability of nutritious food (Harper et al. 2009). The sampled cities with the highest percentage of residents living in poverty are Detroit (36.4%) and New Brunswick (34.2%) (U.S. Census Bureau 2018a). In contrast, Colorado Springs (11.7%) and San Francisco (10.9%) report the lowest percentages.
Figure 1 also displays two general food system measures. The presence of food deserts is an important proxy for food system challenges such as access to and affordability of nutritious food. The highest percentages for citizens living in food deserts are in Austin (75.1%), Winston-Salem (78.2%), and Colorado Springs (76.1%); whereas, San Francisco (10.4%) and Hartford (19.2%) have the lowest percentages. This emphasizes an important aspect of food access: spatially large and low-density cities offer different challenges to food access as distances between stores and dependence on vehicles are likely to be higher. For example, Austin (2653 people/sq. mile), Winston-Salem (1734 people/sq. mile), and Colorado Springs (2141 people/sq. mile) report low population densities, while San Francisco (17,179 people/sq. mile) and Hartford (7179 people/sq. mile) report the highest (U.S. Census Bureau 2018a). Additionally, the obesity of a city’s population can be a proxy for access to/affordability of healthy diets. Detroit (44.5%), Hartford (36.7%), and New
Orleans (35.4%) report the highest percentages of obesity, while San Francisco (17.8%) and Colorado Springs (23.3%) report the lowest percentages.

### 3.2. Structure and membership

Figure 2 reports the structure and membership of each FPC using sunburst charts. The number at the center of each chart identifies the number of members mandated to the council. The first ring out from the center identifies how members are oriented by sector—each color identifies a different stakeholder group, and the pattern identifies the mechanism by which each member is selected to the council. The next ring out identifies the existence of an FPC in the county or region the study FPC is located—white ring, no FPC present; grey ring, FPC present. The outermost ring identifies the presence of an FPC at the state-level—white ring, no FPC present; blue ring, FPC present.

The environment in which councils embed varies across the study FPCs. Five of the 15 FPCs are jointly mandated at both the municipal- and county-level (i.e. Austin, Colorado Springs, Fort Scott, Lawrence, and Saint Paul). Only Minneapolis and Winston-Salem are in regions with independent county-level FPCs. Finally, California, Connecticut, Colorado, Michigan, Minnesota, and North Carolina all have FPCs at the state-level.

Two important design components are membership size and voting rights. Membership size varies considerably across councils; the smallest councils have nine members (i.e. Winston-Salem and Bridgeport) and the largest has 23 members (i.e. Washington, DC). The median number of members across councils is 15. Furthermore, there is a large diversity in stated voting rights. Saint Paul and Winston-Salem are the only FPC mandates to directly reference majority voting. While not outlining specific voting procedures, San Francisco, Bridgeport, Hartford, Washington, DC, and Lawrence identify positions as members who have voting rights in council decisions. Finally, Colorado Springs has the authority to promulgate its own rules of procedure, including voting rules, upon approval from the city council and the county commission. All other councils make no reference to voting.

Overwhelmingly, the mandated membership composition consists of either organizational representatives or community members. While FPCs often identify which sectors or topical areas should be represented, many FPCs do not create positions where specific sectoral and/or issue-focused stakeholders must hold the position. Types of stakeholders commonly referenced in mandates include, but are not limited to, food producers, public officials, health professionals, and faith-based organizations. The most common type of food system stakeholder specifically mandated to a position is government officials (e.g. environmental sustainability departments, economic development/social welfare offices, health departments, and chambers of commerce).

There are two mechanisms by which government representatives gain access to council seats: (1) a department or office (e.g. the mayor’s office) appoints a representative to fill the seat or (2) the seat is filled *ex officio* by a specific government actor (e.g. Minneapolis mandates the City Coordinator of Sustainability to sit on the council). The only exception is New Haven’s aldermanic chair, which is filled through a voting procedure. Across mandates, appointing government representatives is notably more popular than the *ex officio* assignment mechanism. FPC seats are also sometimes
Table 3. Context statements: the inclusion of food system topics coded across mandates.

| City                  | FW/C | AFF | D/N | H/A | JE | LU/B | FP | S/E | R/EO | C/T |
|-----------------------|------|-----|-----|-----|----|------|----|-----|------|-----|
| Austin, TX            | No   | Yes | No   | Yes | Yes| Yes  | Yes| Yes | Yes  | Yes |
| Bridgeport, CT        | No   | No  | No   | No  | No | No   | No | No  | No   | No  |
| Colorado Springs, CO  | No   | Yes | No   | Yes | Yes| Yes  | Yes| Yes | Yes  | No  |
| Detroit, MI           | No   | Yes | Yes  | Yes | Yes| Yes  | No | No  | No   | Yes |
| Fort Scott, KS        | No   | No  | No   | No  | No | No   | No | No  | No   | No  |
| Hartford, CT          | No   | No  | No   | No  | No | No   | No | No  | No   | No  |
| Lawrence, KS          | No   | No  | Yes  | Yes | Yes| Yes  | Yes| Yes | Yes  | No  |
| Minneapolis, MN       | Yes  | No  | Yes  | Yes | Yes| Yes  | Yes| Yes | Yes  | Yes |
| New Brunswick, NJ     | No   | No  | No   | No  | No | No   | No | No  | No   | No  |
| New Haven, CT         | No   | Yes | Yes  | Yes | No | Yes  | Yes| Yes | Yes  | Yes |
| New Orleans, LA       | No   | Yes | Yes  | Yes | Yes| Yes  | No | No  | No   | Yes |
| Saint Paul, MN        | No   | No  | No   | No  | No | No   | No | No  | No   | No  |
| San Francisco, CA     | No   | No  | Yes  | Yes | No | No   | No | No  | No   | No  |
| Washington, DC        | Yes  | Yes | Yes  | Yes | No | No   | Yes| No  | No   | Yes |
| Winston-Salem, NC     | No   | No  | No   | No  | No | No   | No | No  | No   | No  |
| Total count           | 2    | 6   | 10   | 8   | 6  | 4    | 6  | 6   | 7    | 3   |

FW/C: food waste/compost; AFF: affordability; D/N: diet-related disease/nutrition; H/A: hunger/access; JE: justice/equity; LU/B: land use/biodiversity; FP: food production; S/E: sustainable/environmental; R/EO: retail/economic opportunity; C/T: culture/tradition.

Color: green/yes — topic is present; red/no — topic is absent

Table 4. Goal and action statements: percentage of food system topics coded across mandates.

| City                  | FW/C | AFF | D/N | H/A | JE | LU/B | FP | S/E | R/EO | C/T |
|-----------------------|------|-----|-----|-----|----|------|----|-----|------|-----|
| Austin, TX            | 0%   | 14% | 24% | 29% | 0% | 19%  | 14%| 14% | 5%   | 0%  |
| Bridgeport, CT        | 2%   | 7%  | 22% | 40% | 9% | 7%   | 0% | 0%  | 29%  | 0%  |
| Colorado Springs, CO  | 0%   | 0%  | 0%  | 0%  | 33%| 33%  | 0% | 33% | 0%   | 0%  |
| Detroit, MI           | 10%  | 0%  | 14% | 14% | 5% | 10%  | 14%| 10% | 5%   | 0%  |
| Fort Scott, KS        | 0%   | 0%  | 50% | 0%  | 0% | 0%   | 30%| 0%  | 30%  | 0%  |
| Hartford, CT          | 0%   | 9%  | 24% | 39% | 7% | 7%   | 0% | 0%  | 22%  | 0%  |
| Lawrence, KS          | 4%   | 0%  | 4%  | 4%  | 15%| 0%   | 4% | 8%  | 8%   | 0%  |
| Minneapolis, MN       | 0%   | 1%  | 19% | 0%  | 0% | 13%  | 5% | 6%  | 6%   | 0%  |
| New Brunswick, NJ     | 0%   | 11% | 28% | 11% | 17%| 0%   | 17%| 22% | 17%  | 0%  |
| New Haven, CT         | 0%   | 0%  | 0%  | 0%  | 0% | 0%   | 0% | 0%  | 0%   | 0%  |
| New Orleans, LA       | 0%   | 0%  | 0%  | 0%  | 0% | 0%   | 0% | 0%  | 0%   | 0%  |
| Saint Paul, MN        | 0%   | 25% | 56% | 44% | 0% | 0%   | 0% | 0%  | 6%   | 0%  |
| San Francisco, CA     | 0%   | 0%  | 20% | 80% | 0% | 0%   | 0% | 0%  | 0%   | 0%  |
| Washington, DC        | 0%   | 0%  | 4%  | 15% | 4% | 0%   | 2% | 13% | 37%  | 0%  |
| Winston-Salem, NC     | 0%   | 0%  | 0%  | 15% | 38%| 0%   | 8% | 15% | 31%  | 0%  |
| Across all FPCs       | 1%   | 4%  | 15% | 22% | 7% | 7%   | 9% | 13% | 2%   | 0%  |

FW/C: food waste/compost; AFF: affordability; D/N: diet-related disease/nutrition; H/A: hunger/access; JE: justice/equity; LU/B: land use/biodiversity; FP: food production; S/E: sustainable/environmental; R/EO: retail/economic opportunity; C/T: culture/tradition.

Color: the percentage of goal and action statements found in the mandates based on the topical coding where white represents 0% of a mandates statements and dark green represents 100% of a mandates statements.

allotted to representatives of school districts or universities, food producers or retailers, and non-government-affiliated health professionals. Detroit is the only FPC placing substantial emphasis on these less common stakeholder groups, specifically allotting 11 of its 21 seats to these groups. Non-government members are often appointed by the executive branch (e.g. mayor) or legislative branch (e.g. common council).

3.3. Food policy council mandates: food system topics

Table 3 focuses on the topics coded to context statements across councils—representing why the FPC was established. In contrast, Table 4 identifies the topics associated with goal
and action statements—representing what topics the council should be addressing. Since action statements are coded for both food system topics and actions, the analysis in section 3.3.2 examines food system topics, whereas the specific actions will be addressed later in section 3.4.

3.3.1. Context Statements: food system topics
Table 3 uses a binary, color-coded reporting schema identifying if topics are present in the context statements of mandates (i.e. green/yes = topic is present; red/no = topic is absent). These statements include food system topics as contextual reasons for why FPCs were established, but do not specify what topics FPCs should address, or how they should address these topics.

Bridgeport, Fort Scott, Hartford, New Brunswick, and Winston-Salem are not included in the Table 3 analysis as their mandates lacked any context statements. Table 3 reflects the unique pattern of food system topics across FPCs suggesting a responsiveness to each city’s context. Patterns across the councils with and without additional councils at the county/region or state levels are not observed.

Yet, topical patterns are observed. All ten mandates included diet-related disease and nutrition context statements and hunger and access are identified in 8 out of 10 mandates. It becomes evident diet-related disease and nutrition as well as hunger and access are often closely intertwined in the mandate language.

Austin is a responsive community with limitless possibilities so there is no excuse for hunger; Affordable and nutritious food, provided in a respectful manner, is a human right. (Austin)

Community Food Security can be defined as the condition which exists when all the members of a community have access, in close proximity, to adequate amounts of nutritious, culturally appropriate affordable food, at all times. (Detroit)

While these topics were most common across all mandates, they were most strongly emphasized in the context statements of the Austin and Colorado Springs FPCs. Austin’s mandate has 10 context statements for which seven represent the intersection between diet-related disease and nutrition and hunger and access, whereas Colorado Springs’s mandate has seven context statements with four at the same intersection. Each has the highest percentage of their population living in food deserts, while Detroit and New Orleans report the highest obesity rates in their populations. This illustrates how context statements reflect the context of their cities.

In addition, hunger and access context statements often identify a disproportional and inequitable burden on different portions of the population. Furthermore, addressing the barriers to food access is often not sufficient since food should also be nutritious and affordable. The co-occurrence of these three topics (i.e. nutrition, equity, and affordability) across context statements expands the notion of access beyond the availability of food in a geographical region, highlighting the complexity of the food system, and acknowledging multiple facets of food policy.

Throughout the mandates, a second topical cluster of context statements is identified around food production, sustainability, economic opportunity, and nutrition. This cluster is exemplified in Austin’s reasoning: “The [city] wishes to recognize that increasing the amount of fresh, nutritious and sustainably grown food in our region
will have a positive impact on our local economy.” This cluster of topics reflected in context statements largely focuses on (1) the attributes of food production or (2) what secondary outcomes food production can achieve. When production is referenced in context statements, it often qualifies what kind of production should be supported. Austin qualifies production as sustainably grown, yielding fresh and nutritious food, and maintaining natural resources; Minneapolis qualifies production as healthy, sustainable, and local; and New Haven qualifies production as local and from small-scale farms. Other mandates link production to other policy topics. Colorado Springs associates food production with “public health, land use, economy, and quality of life of the residents of Colorado Springs.” Lawrence sees increasing food production as an opportunity to “grow food sector businesses and increase resident access to healthy local food.” New Haven supports production as “a model [that] advocates for … strengthening the local economy by supporting local, small-scale farms and other producers.”

In addition to understanding the common topical clusters, it is also important to better understand which food system topics are infrequently observed. Minneapolis and Washington, DC are the only cities identifying food waste and composting in their context statements. Minneapolis’s FPC is proposed as a mechanism to help citywide initiatives “grow, process, distribute, eat and compost more healthy, sustainable, locally grown foods,” thereby emphasizing a life cycle approach from production to consumption and finally to disposal. Washington, DC also takes this life cycle approach by including the components of “growth, production, processing, distribution, disposal, or repurposing” in their definitions of food assets and local food economy.

Culture and tradition were infrequently coded in context statements. While many cities include justice and equity (6/10 mandates), only three specifically mentioned the cultural and traditional importance of food in context statements: New Haven, Detroit, and Austin. Culture and tradition are referenced in two distinct ways. First, New Haven and Detroit closely associate culture with access, i.e. culturally appropriate food, emphasizing the culture and tradition of food as important to the well-being of individuals. Austin identifies the importance of culture and heritage in their food system as an aspect worth preserving, stating the city “wishes to ensure that the region preserves [its] unique food culture, traditions, and heritage.” This represents a shift from the foods culturally familiar and enjoyable for an individual to food culture as an asset to the community. In these three mandates, one can see how the specific, contextual focus of the city brings nuance to the justification for FPCs.

### 3.3.2. Goal and action statements: food system topics

Table 4 displays the percentage of goal and action statements found in the mandates based on the topical coding. This shifts the discussion from why the FPCs were established, as identified in section 3.3.1, to what topics the FPCs should be addressing. The percentage representation identifies how often particular topics are reflected in FPCs’ goals and actions. For example, 14% of the statements identified as goal and action statements in the Austin mandate are associated with the topic of affordability. Percentages for individual cities do not always add up to 100% because statements could be (1) double coded as they conjointly reflect multiple topics or (2) were not coded if they did not directly reference local food system topics. An example of the latter in
Saint Paul mandate is: “Advise and comment on the coordination of programs between governmental agencies.” While the statement offers a clear action (i.e. advise), it does not denote a food system topic, and, thus, is not included in the topical analysis.

Two FPCs are specifically identified as health and nutrition specific councils (i.e. Saint Paul and San Francisco). Both cases might, therefore, be seen as outliers skewing the results toward a greater percentage of diet-related disease and nutrition and hunger and access statements. After excluding the two cities from the analysis, however, the aforementioned topics were still, on average, the most frequently referenced topics across the remaining FPCs (i.e. diet-related disease and nutrition and hunger and access each still represented 14% of coded statements across all FPCs).

When observing trends across the councils with and without additional councils at the county/region or state levels, again, one does not observe differences. While additional councils are expected to represent additional political support or resources, one can see these councils are not systematically different in the breadth of topics identified in their goal and action statements.

Topics captured in goal and action statements are similar to those captured in context statements. The complementary goal statement closely mirrors Detroit’s context statement identified above:

The stated mission of the DFPC is commitment to nurturing the development and maintenance of a sustainable, localized, food system and food secure City of Detroit in which all of its residents are hunger-free, healthy and benefit economically from the food system that impacts their lives. (Detroit)

Additionally, food production and economic growth statements in context statements are likewise reflected in goal and action statements. Again, referencing the context statements outlined above, Lawrence identifies “agricultural producers, food entrepreneurs, and food sector workers thriving in our regional economy” as a goal the council shall help advance in the community.

While generally it is expected that context statements and goal and action statements support each other, some FPCs do not overlap across these statement types. While the addition or absence of topics between these statement types are observed in all FPCs, there is no consistent pattern. The greatest difference is observed in the Colorado Springs FPC. Despite including many topics in their context section, the mandate focuses narrowly on justice and equity, land use, and sustainability in its goal and

| City                  | Added                                                                 | Lost                                                                 |
|-----------------------|------------------------------------------------------------------------|----------------------------------------------------------------------|
| Colorado Springs, CO  | Affordability, diet-related disease and nutrition, hunger and access, food production, and retail and economic opportunity |                                                                      |
| Detroit, MI           | Waste and compost, land use and biodiversity, and food production       | Affordability, and culture and tradition                              |
| Lawrence, KS          | Food waste and compost, hunger and access, and justice and equity       |                                                                      |
| Minneapolis, MN       | Culture and tradition                                                  | Justice and equity, and land use and biodiversity                     |
| Saint Paul, MN        |                                                                       | Affordable, hunger and access, and retail and economic opportunity  |

Table 5. Topical changes between context statements and goal and action statements.
3.4. Food policy council mandates: available actions and their association with food system topics

While analyzing the frequency of food systems topics depicts what the FPC is designed to address, the availability of actions indicates how the council should address these topics. Table 6 identifies the specific actions available to each of the FPCs demonstrating large variation. Colorado Springs, New Haven, and New Orleans are limited in their available actions. Colorado Springs’ mandate makes the clearest statement of the council’s limited power, stating “[t]hrough vision, leadership, and service the Board will work in an advisory capacity only, and not in a regulatory capacity, for the improvement of the local food system and to transform it into a sustainable system.” When actions are limited, councils are often restricted to advising or reporting to other governing bodies. In contrast, Detroit and Minneapolis are given a broad suite of actions. In Detroit’s FPC, 14 total actions are prescribed to specific food system topics. Likewise, the Minneapolis mandate contains eight coded action statements. By better understanding the opportunities or constraints imposed by these action statements, one can better understand how an FPC can act.

Given the complexity across action statements, the action-based coding, the recipient of these actions, and the types of outputs being produced is reported first. Second, the co-occurrence of action-based and food system-topic-based coding is discussed.

### 3.4.1. Available actions: recipients and outputs

Across the bottom row of Table 6 are the total counts of statements coded to each action across all FPCs. While advise, design, coordinate, research, and report are all featured in 10 different FPC mandates, the number of statements coded to each action
across all FPC mandates varies substantially. The most common statement by count is research which is coded to 51 individual action statements; followed by advise and coordinate—both coded to 30 statements; then design—coded to 23 statements; and report—coded to 22 action statements. As reported previously, Table 6 identifies no systematic pattern when comparing FPCs with and without additional councils at other levels of government.

Research statements often orient in two ways: (1) tracking trends and changes in the local food system identifying challenges and opportunities and (2) exploring external policy developments identifying innovative ideas. The excerpt below from Detroit is an example of the former, whereas the excerpt from Washington, DC is an example of the latter.

The goal of the DFPC [is to] produce and disseminate an annual City of Detroit Food System Report that assesses the state of the city’s food system. (Detroit)

Monitor and research national best practices in food policy, including public health policy for dietary-related illness, and determine how they could be implemented in the District. (Washington, DC)

Mandates often identify multiple and specific topics to be researched internally (e.g. food prices, health outcomes, and amount of production) and externally (e.g. policies, programs, and best practices) leading research to be the most coded action across FPC mandates.

FPCs are also often mandated to report information. There are three types of reports. First there are annual reports on Councils’ progress on addressing their respectively mandated goals. Annual reports are required for Minneapolis, New Orleans, Bridgeport, Hartford, San Francisco and are exemplified by the following excerpt from the Hartford mandate:

The food policy advisory commission shall submit an annual report on or before October 1 to the common council with copies to the mayor and city manager summarizing the progress made in achieving each of the goals set forth in section 2-329 above. (Hartford)

The second report type is oriented around the “state of the food system.” Detroit, Saint Paul, San Francisco, and Washington, DC are mandated to file these reports requiring specific domains to be included. While the first two types of reporting may seem similar, annual reports focus on reporting the achievements of the council, whereas the state of the food system reports convey the status of key food system measures in the city. Finally, the last reporting type—required of Minneapolis, Fort Scott, New Haven, and San Francisco—represents evaluation or oversight of the council itself, as exemplified by the following statements from the New Haven mandate:

Three years after its initial formation and every three years thereafter, the Board of Aldermen will evaluate the council on the basis of previous annual reports. As long as the council meets its goals or makes reasonable progress toward them, the council will be reauthorized for another three years. (New Haven)

Evaluation or oversight reports are the only type of reporting including performance-based sanctions for the FPC. Across the ten FPCs mandated to conduct some sort
of reporting, San Francisco is the only FPC required to submit all three forms of reporting and Minneapolis is the only FPC responsible for submitting two forms (i.e. annual reports and state of the food system reports).

In addition to reporting, mandates also identify what the FPC should be implementing and evaluating. Because these activities are often discussed jointly, they will be considered together here. Lawrence and San Francisco’s implementation activities are directly associated with a government-adopted food system plan. Lawrence is additionally tasked with evaluating “progress and identifying indicators to track progress … ensuring accountability in meeting goals and objectives in the plan.” In contrast, other FPCs are more general in their implementation and evaluation requirements. Detroit’s mandate is the broadest identifying the FPCs responsibility to implement and evaluate “human, financial and material resources.” Minneapolis is charged with implementing and evaluating the recommendations of the council itself. Finally, the mandates of Austin, Bridgeport, and Hartford focus solely on the evaluation of policies already being implemented by their city’s government agencies. Austin focuses on food and nutrition policies of the city and county. Bridgeport and Hartford are charged with evaluating their city’s existing programs related to hunger, obtaining nutritious food, and the administration of city food distribution programs.

After research, advise is the second most coded activity—coded in 10 of the 15 mandates. This may not be surprising, as advising a government agency on the food system is a key reason for embedding FPCs in government (Gupta et al. 2018). Yet, it is important to understand who the FPC is mandated to advise. Given the publicly mandated nature of FPCs in the study, they are most often mandated to advise a mayor, city council, and/or county commissioners (7 out of 10: Austin, Colorado Springs, Detroit, Fort Scott, Lawrence, Minneapolis, San Francisco). Additionally, six FPCs are mandated to advise another public agency or entity: Minneapolis is mandated to advise the Park Board of Minneapolis; New Orleans the Special Projects and Economic Development Committee of the city council; Saint Paul the Division of Public Health and the Department of Planning, and Economic Development; and Washington, DC the Food Policy Director. Only Austin is mandated to advise the public-at-large, and only Detroit is mandated to advise “private entities.” As one can see, FPCs mainly advise government entities and are not generally oriented toward citizens or private actors.

FPCs are almost entirely mandated to provide reports to elected or appointed officials. Bridgeport, Hartford, New Haven, Saint Paul, San Francisco, and Washington, DC submit reports to the mayor, city council, and/or county commissioners. New Orleans submits its reports to the Special Projects and Economic Development Committee of the city council, not the city council directly. Detroit’s mandate does not specify who is the direct audience of their reporting efforts.

Finally, since the literature identifies coordination of stakeholders in the local food system as one of the major roles of FPCs, examining who each FPC is mandated to coordinate is important. Across the 10 FPCs mandated to engage in coordinating activities, six distinct groups are identified: (1) other jurisdictions (Austin, Fort Scott, Lawrence, Winston-Salem, Washington, DC), (2) others within their jurisdiction’s government (Austin, Bridgeport, Detroit, Hartford, Lawrence,
Washington, DC), (3) other similar groups or non-profits (Austin, Detroit, Minneapolis, Winston-Salem, Saint Paul), (4) citizens (Fort Scott, Lawrence, Winston-Salem, Saint Paul), (5) youth (Fort Scott), and (6) private entities or businesses (Austin, Detroit, Washington, DC). It is noteworthy that seven out of the ten FPCs mandated to coordinate stakeholders are expected to coordinate across multiple of the six types identified. Furthermore, while reporting and advising are highly oriented toward government officials, one can see coordination within government (6 out of 10) is mandated at nearly the same rate as other jurisdictions (5/10), other similar groups/non-governmental groups (5/10), and citizens (4/10). This suggests coordination is expected to be more public-facing, while advising and reporting is more government-facing.

### 3.4.2. Available actions and their association with food system topics

While the previous subsection identifies the products and recipients of FPC action, the co-occurrence between topic and action must be considered. Table 7 outlines patterns of how the mandate designers expect FPCs to take action to address specific topics. Table 7 presents the percentage of statements for each topical area associated with each action across all mandates in our sample. For example, of the ten action statements across all FPCs coded to the topic affordability, 50% mandate the council to advise another group. The count by topic is identified across the bottom row. The discussion of Table 7 does not include food waste and compost, land use and biodiversity, and culture and tradition, as well as the activities of implementation and evaluation, due to the small sample size of statements associated with those topics.

Table 7 also demonstrates that research activity consistently represents a large proportion of the action statements across most food system topics. It is noteworthy that 30% to 42% of coded action statements across all topics, except food production, are coded to research. While some action statements identify general topics for the FPC to research, other mandates identify many specific topics across multiple statements.

The city shall continuously collect data on the extent and nature of public food programs and hunger in the city. (Bridgeport)
The Board shall: (1) monitor the availability, price and quality of food throughout the Austin and Travis County area; (2) collect data on the food security (i.e., access to an affordable, diversified local food supply) and the nutritional status of city residents; … (5) explore new means for the city and county to improve the local food economy, the availability, sustainability, accessibility, and quality of food and our environment, and assist city and county departments in the coordination of their efforts. (Austin)

Despite the common prevalence of research statements across most topics, a noticeable reduction exists for food production. Detroit is the only FPC linking food production and research as a means to assess the city’s activities in food production.

There is considerable co-occurrence between action statements coded to the topics of justice and equity and the action of coordination (57% of justice and equity statements are also coded to coordinate). Lawrence offers the most robust example connecting an FPC’s duty to coordinate stakeholders and its responsibility for equity, acknowledging: (1) urban and rural communities; (2) economic diversity; (3) demographic characteristics, such as socioeconomic status, race, ethnicity, gender identity, religion, national origin, age, and immigration status; and (4) the influence of systemic barriers. There is also a decrease in the co-occurrence of statements coded to coordination and the topic of hunger and access. This depressed co-occurrence is magnified as hunger and access are already represented less frequently in the mandates (3% of hunger and access statements are also coded to coordinate) than similar topical areas, such as affordability (10%) and diet-related disease and nutrition (11%).

4. Discussion and policy implications

By analyzing the mandates of municipal-level FPCs, this study offers nuance to current FPC literature by evaluating who is a part of the FPC, why FPCs are established, what topics they can address, and how they can address them. While many studies have worked to understand how individual actors engage in FPCs (Bassarab et al. 2019; Harper et al. 2009), few attempt to understand how council mandates inform these activities (Siddiki et al. 2015). By better understanding the mandates themselves, nuance can be brought to ongoing debates around the design of FPC policy, as well as other similar collaborative governance designs, as mandates are the regulatory context determining stakeholder action.

The results suggest significant nuance is lost when only comparing the structural differences of collaborative governance arrangements broadly (e.g. embedded or not embedded in government) as has been done in extant research on FPCs (Bassarab et al. 2019; Gupta et al. 2018). While this study focuses narrowly on publicly mandated FPCs at the municipal-level, the nuance and diversity across this small sample is apparent. Thus, the results of this study adds richness to the four main functions of FPCs identified by Harper et al. (2009). While FPCs are expected to foster coordination, our results identify the diversity of stakeholders whose inclusion is mandated in such coordination efforts. Furthermore, while the recipients of research and advice statements are discussed broadly in the FPC literature (Gupta et al. 2018; Harper et al. 2009), our study shows the outputs of these activities are highly concentrated to government officials. Thus, FPCs are not only designed as mechanisms to increase coordination, research,
and advice around food system issues, but they establish the likely beneficiaries of these actions, leading us to recommend:

Policy Recommendation #1: In addition to delineating activities through policies, policy designers should consider whether the targets of activities and the match between activities and targets is consistent with policy goals.

The analysis shows food system topic identification not only changes between mandates but is also inconsistent across sections of the same mandate. The difference between context, goal, and action statements can be seen as the difference between why the FPC was established, what it should be addressing, and how it should be addressing it, ranging from hortatory symbols to mandatory actions. This variation in authority is reflected in the statement types, as context statements identify values or contexts but require no direct action; goal statements identify topics but, again, require no direct action; and action statements identify both topics and require action. Interestingly, mandates, in general, are adding topics rather than reducing topics when moving from context statements to goal and action statements; metaphorically putting more skin in the game not less. This analysis leads us to recommend:

Policy Recommendation #2: Policy designers should aim to remain consistent across context, goal, and action statements to align the why, what, and how of policies mandating collaborative governance arrangements.

Actions themselves offer a spectrum of power and authority. While advise, design, and research statements offer an FPC access to the food policy process, the final veto authority is retained by those they are advising, often the local government. This consolidation of information back to the government is cited as a constraint of FPCs embedded in government, since information provided is tailored to government and not community interests (Bassarab et al. 2019), and key stakeholders are less willing to “come to the government’s table” (Gupta et al. 2018). In contrast, implement statements offer the direct authority to take action establishing programs or policies (Anderson 2014), while coordination statements offer engagement with new knowledge (Schneider and Ingram 1990) and the possibility to disseminate information across non-government and government stakeholders (Anderson 2014; Schneider and Ingram 1990). Thus mandates identify both what actions the FPC is authorized to take and who the FPC is designed to engage leading to:

Policy Recommendation #3: In addition to establishing the activities prescribed to collaborative governance arrangements, policy designers should consider if final decision-making authority across each of these activities resides with the council itself or an outside entity.

Policy Recommendation #4: Because actions are often associated with specific policy targets, policy designers should consider which stakeholders are being engaged across activities prescribed to collaborative governance arrangements.

The capacity of an FPC’s policy design can also be understood as the suite of actions available. For instance, Colorado Springs, which is only mandated to advise the city and county governments, is expected to function in a different capacity than Detroit, which is mandated to conduct all activities covered in this analysis. Given this variation, one might expect drastically different policy outputs and outcomes. While a
narrow suite of actions might be seen as a constraint to the FPC (Harper et al. 2009; Quick and Feldman 2011), scholars also argue a narrow breadth of activity can focus the depth of engagement and success of implementation (Sabatier and Mazmanian 1980). Others argue a breadth of authority allows FPCs the flexibility needed to interact with a complex policy environment (Bassarab et al. 2019; Gupta et al. 2018). Given this discussion, we recommend:

Policy Recommendation #5: When considering the suite of actions mandated to a collaborative governance arrangement, policy designers should consider both the breadth and depth of responsibility the suite of actions offers the collaborative governance arrangement.

While the results and policy recommendations above are derived from a comprehensive sampling strategy offering robust generalizability to municipal-level, public FPCs in the US, the researchers acknowledge many food policy councils, and collaborations more broadly, are less formally designed. Yet, one might expect to observe similar patterns across less formal governing documents such as bylaws or even ad hoc mission statements. Furthermore, it is unclear if the divergent political contexts allow the results presented here to be generalized to other non-U.S. contexts. Future work should explore the consistency of membership, context, goal, and actions statements across levels of formality and across cultural contexts.

Second, understanding how collaborative arrangements, like FPCs, are structured and governed by de facto rules (i.e. formal policy rules identified in their governing documents), offers a useful basis against which to see what these groups do in practice. While the latter is beyond the scope of the research reported in this article, future research efforts will aim to understand divergence among policies on paper and in practice, in an effort to understand the implications of such policy implementation and the attainment of group objectives.

Nevertheless, our findings reflect no strict dichotomy between FPCs as forums for participatory food democracy and FPCs as centralized implementation processes serving government. Instead, the spectrum of participatory democracy, centralization, and authority is constructed by the mix of statement types, individual actions available, and the suite of actions in FPC mandates. While the literature often frames the structural differences of FPCs as embedded or not embedded in government, this analysis shows significant differences in authority. Given the different framing of who is invited to participate, why the FPC is established, what topics they can address, and how they can address them, one can expect a variety of different actions, outputs, and outcomes.

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### Table A1. Link to mandating documents for cities included in the study sample.

| City                  | Name of food policy council                                      | Web-link to mandate                                                                 |
|-----------------------|------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Austin, TX            | Austin Travis County Food Policy Board                           | http://austintexas.gov/edims/document.cfm?id=123825                                  |
| Bridgeport, CT        | City of Bridgeport Food Policy Council                           | https://library.municode.com/ct/bridgeport/codes/code_of_ordinances?nodeId=TI2ADPE_CH2.123BFOPOCO |
| Colorado Springs, CO  | Colorado Springs and El Paso County Policy Advisory Board        | https://citydocs.coloradosprings.gov/WebClerk/GetDoc.aspx?DocId=43018&Show            |
| Detroit, MI           | Detroit Food Policy Council                                      | https://detroitmi.gov/Portals/0/docs/City%20Clerk/2009%20Council.pdf                |
| Fort Scott, KS        | Bourbon County Food Alliance                                     | https://library.municode.com/ct/fort_scott/codes/code_of_ordinances?nodeId=TI2ADPE_CH2.80BOCOFOAL |
| Hartford, CT          | Hartford Advisory Commission of Food Policy                      | https://library.municode.com/ct/hartford/codes/code_of_ordinances?nodeId=PTIIIICOGEOR_CH14FORVREES_ARTIIIFOPOCO |
| Lawrence, KS          | Douglas County Food Policy Council                               | https://assets.lawrenceks.org/agendas/cc/2019/02-12-19/fpc-ord9637.pdf              |
| Minneapolis, MN       | Homegrown Minneapolis Food Council                               | https://lims.minneapolismn.gov/Download/File/3370/Resolution-2011R-445-Homegrown-Minneapolis-Food-Council.pdf |
| New Brunswick, NJ     | New Brunswick Community Food Alliance                             | https://nbfoodalliance.org/wp-content/uploads/2018/09/nbcfa-city-resolution.pdf    |
| New Haven, CT         | New Haven Food Policy Council                                    | https://library.municode.com/ct/new_haven/codes/code_of_ordinances?nodeId=PTIIIICOGEOR_CH14FORVREES_ARTIIIFOPOCO |
| New Orleans, LA       | New Orleans Food Policy Advisory Committee                       | https://mclibraryfunctions.azurewebsites.us/api/munidocDownload/30001/M7242007-05-03PDF/pdf |
| Saint Paul, MN        | Saint Paul-Ramsey County Food and Nutrition Commission Task Force| https://studylib.net/doc/14124511/iii.-local-food-policy-goals-and-issues-f-3-          |
| San Francisco, CA     | San Francisco Food Security Task Force                           | http://www.sfbos.org/ftp/uploadedfiles/bdsuperintendent/ordinances05/00206-05.pdf    |
| Washington, DC        | District of Columbia Food Policy Council                         | http://growingfoodconnections.org/wp-content/uploads/sites/3/2021/07/Food-Policy-Council-and-Director-Establishment-Act-Washington-D.C..pdf |
| Winston-Salem, NC     | Winston-Salem Urban Food Policy Council                          | https://library.municode.com/nc/winston-salem/codes/code_of_ordinances?nodeId=PTIIIICOOR_CH2AD_ARTIIIFOPOCO_DIV14URFOPOCO_S2-298ME |