

Local food innovation in a world of wicked problems: The pitfalls and the potential

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Abstract

Food-oriented markets, such as food innovation districts (FIDs), have been touted as potential methods to address complex societal issues involving the environment, poverty, and health. On this front the Grand Rapids Downtown Market (DTM) was created in 2013, envisioned as a vibrant public space for local food, entrepreneurship, community health, and jobs. An innovative, *collective* response to the interconnected and urgent problems of poverty, access, health, diet, and environment, the DTM can serve as a case study

through which the value and necessity of a wicked problems framework become apparent. Wicked problems literature demonstrates that collaborative and iterative processes are essential to effective and inclusive transformational change of food systems, while also emphasizing that there can be no final, ideal solution. On the other hand, as an FID intentionally located in a low-income neighborhood, the DTM has been subject to criticism about top-down, expensive, and exclusionary practices aimed at gentrification. In the end, this analysis suggests that while FIDs can address local problems resulting from dominant food systems and practices, they can also function as a gentrifying force. Efforts more directly aimed at bottom-up, participatory engagement are essential to making collectively systemic, equitable changes in current food systems and practices. Emphasizing the need for bridge institutions, we argue that it is essential to value actively a wider array of knowledge cultures.

Keywords

wicked problems, food innovation district, food access, gentrification, food systems, food hub

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Introduction and Purpose

Place-based institutions designed to encourage the production, aggregation, and sale of local foods have become increasingly popular as a means of addressing the widespread and interconnected problems of poverty, health, diet, and environment. Food hubs, food innovation districts, and farmers' markets are prime examples of local food outlets that have the potential to bring together diverse people, expand community interactions, promote economic development, improve access to local and healthy food, provide new outlets for small farmers, and enhance sustainable food systems (Hodgson, 2012; PolicyLink, 2014). However, there is some evidence that food-oriented markets can also serve as a mechanism for neighborhood gentrification (Gonzalez & Waley, 2013).

Grand Rapids, Michigan, is the location for one such recently created organization: the Downtown Market (<http://www.downtownmarketgr.com>). The privately funded nonprofit Grand Action Foundation invested US\$30 million to open this year-round indoor public market and seasonal outdoor farmers' market in 2013 (Krietz, 2013). One of its primary goals was to become a center of local food excitement through a mixed-use concept integrating (1) facilities for food production and retailing, (2) new product development, (3) food and nutrition education, and (4) greenhouse and event space. As a food innovation district, the DTM focuses on processing, distribution, and collaboration, seeking to provide easy access, opportunity, and viability for small producers (Dansby, Grennell, Leppek, McNaughton, Phillips, Sieloff, & Wilke, 2012). Hailed as a dynamic civic space for local food, entrepreneurship, community health, and jobs, the DTM can be viewed as an innovative, collective response to the interconnected and long-term problems of poverty, access, health, diet, and environment, among many others. As a food innovation district intentionally located in a low-income neighborhood, the DTM has been subject to criticism about top-down, expensive, and exclusionary practices that tend to gentrify the neighborhood. Examining the DTM

through the lens of literature on wicked problems (WP) illuminates a number of issues with which the DTM has struggled, as well as its potential to operate as an effective "bridge" institution.¹ The WP framework is additionally valuable since it can broaden the scope of new initiatives that might otherwise become a force for gentrification.

The Development of the Downtown Market

The DTM is a "food innovation district" (FID), defined by Dansby et al. (2012) as an entity bringing together communities, local food producers, and other value-added activities meant to provide healthy food options and civic engagement activities for residents. Such offerings promote local food systems for economic development by agglomerating small growers, producers, wholesalers, and retailers in single-unit or close geographical venues. Food innovation districts are intended to spur job growth, increase healthy food options, and create a "sense of place" with a focus on improving the quality of life for surrounding residents (Cantrell, Colasanti, Goddeeris, Lucas, McCauley, & Michigan State University Urban Planning Practicum 2012, 2013, p. 2). Along with similar innovative local food outlets, the goals of FIDs are to change local food systems so they are more equitable (PolicyLink, 2014, p. 1).

During the planning phase for the DTM, 20 downtown sites were examined as possible venues. The site ultimately chosen was selected because of (1) its highway visibility; (2) the availability of on-site parking; (3) easy access via car, bus, foot, and bicycle; (4) its interesting architecture and adaptive reuse of current structures; (5) the availability of adjacent properties for redevelopment; (6) its ability to further support existing investments in the area by nonprofits; and (7) the potential to extend the "downtown" area (Market Ventures, Inc., 2010). The site was also affordable: the Grand Rapids Downtown Development Authority is leasing it for one dollar a year. In listing the advantages of the location, the developers highlighted a few challenges, noting that the area was perceived both as unsafe and on the periphery of the downtown

community, various kinds of experts, and other organizations involved in the issue (Lake, 2014).

¹ Bridge institutions intentionally seek to collaborate with other interested stakeholders, including the surrounding

area. This assessment demonstrates the care with which planning took place; for instance, there was consideration of both a long list of alternative sites as well as the project's potential broader impact on the area. The assessment additionally recognized the inherent trade-offs involved in placing the market in different locations.

Research on the surrounding area indicated that with supporting infrastructure the market could be a successful venture. A feasibility study conducted by Market Ventures, Inc., of Portland, Maine, found that there are 12,200 farms in the 11 counties surrounding Grand Rapids, with US\$2 billion in revenue annually (Schneider, 2012). This finding, along with indications of high consumer demand and the potential for positive economic impact (US\$25 million in sales annually were predicted) supported Grand Action's decision to build the DTM. The study also indicated that the DTM would generate 1,270 jobs and have US\$775 million in regional impact within its first 10 years (Market Ventures, Inc., 2010).

The first floor of the indoor market, with 25,000 square feet (2,323 square meters), has room for up to 24 year-round vendors, a brew pub or wine bar, and a farm-to-table restaurant (Harger, 2012). As of December 2014, most of the indoor vendor spaces were filled. The vendors sell a variety of items, including gourmet popcorn, olive oils, wine, cheese, fruit and vegetables, smoothies, gourmet seasonings and herbs, preserves, pasta and sauces, gourmet coffee, handmade ice-cream, flowers, and baked goods. Among the vendors there are a fishmonger, butcher, artisan bread-maker, and chocolatier (Harger, 2013). The second floor contains a banquet room with a demonstration kitchen, three greenhouses, a children's teaching kitchen (which includes equipment stations on hydraulic lifts), commercial incubator kitchens, an educational space for commercial lease, and a green roof. It also includes an outdoor terrace with seating, two rentable meeting rooms with state-of-the-art conference equipment, administrative offices, and restrooms. The third floor has 9,000 square feet (836 square meters) of commercial lease and/or banquet space. The DTM regularly holds culinary demonstrations, date nights, and similar events in order to promote opportunities for

engagement, draw customers to the DTM for education, and increase sales.

The outdoor market, with room for 52 vendors, consisting of "local and regional farmers, growers, producers and food artisans" under the shed roof (Downtown Market Grand Rapids, n.d.a, para. 1) is open for three to five hours three days a week during summer months, with decreased hours in spring and fall. DTM vendors accept multiple forms of food assistance, including Supplemental Nutrition Assistance Program benefits (SNAP), Double Up Food Bucks (a purchasing incentive program making available Michigan-grown fresh produce for SNAP-eligible participants [Double Up Food Bucks, 2014]), as well as WIC and Senior Farmers' Market Nutrition Program coupons.

As research indicated, the potential for economic and social change within the geographic boundaries of the market is clear. Indeed, a 2012 *New York Times* article touting the future achievements of the DTM argued that no other small cities in the Midwest have been as successful in revitalization as Grand Rapids. The city's success can be attributed to its "distinctive partnerships formed between this city's redevelopment agencies and wealthy industrialists and philanthropists" (Schneider, 2012). The following analysis of the DTM as a new food innovation district provides a useful case study about the potential for such institutions to operate as exclusionary and gentrifying forces as well as the opportunities they have to support the community and promote greater equity.

A Wicked Problems Case Study

A Holistic, Single-Case Design

This case study analyzes the Grand Rapids Downtown Market using a holistic, single-case design (Yin, 2012) and a wicked problems framework. The authors collected a wide array of information on the DTM through documents, interviews, and participant observation.

Documents included reports, news articles, and the DTM's official website as resources for historical and current plans and efforts. The interviews were unstructured, resulting from

anecdotal discussions during participation in community meetings, visits to the DTM, and conversations with community stakeholders. Interviews occurred during the development of the DTM in January 2014 and continued through summer 2014. Following discussion with community residents, comments were recorded through written documentation by L. Sisson. Participant observation included attendance at meetings related to the development of the DTM, visits to the DTM, and attendance at community meetings. In addition, the authors bring a host of interdisciplinary insights to bear on the analysis of the DTM through a diverse set of qualifications, which include expertise in wicked problems literature, nutrition, systems thinking, democratic deliberation, facilitation, and sustainability, as well as equity and food access. This study was determined not to be human subject research by the Grand Valley State University human research review committee.

A Wicked Problems Framework

The developers of the Downtown Market set lofty goals to address such problems as revitalizing a neglected downtown neighborhood (frequently seen as an effort that results in gentrification) and improving the local food environment; as such, their efforts can be analyzed through the wicked problems (WP) framework. This framework is valuable because it supports a comprehensive

Table 1. Comparative Indications of Simpler and Wicked Problems^a

Simpler Problems	Wicked Problems
Manageable complexity	Extreme complexity
Clearly defined problem	Messy, interconnected set of problems
Low stakes and/or low risk	High stakes and/or high risk
Relative certainty and consistency	High levels of uncertainty and variability
Agreement likely	Conflicts in values
Little need to consult others	Isolation between stakeholders
Appeal to expert for solution	Expertise is not enough
Ideal win-win possible	Ideal resolution unlikely

^a Freeman (2000) uses a similar framework in order to highlight how our water policy problems are wicked, requiring better collaboration across disciplinary expertise, policy arenas, and the local public, as well as integration of separate knowledge structures (p. 483). He argues that effective public water policy requires we do more to hold one another accountable, integrate our knowledge, and empower the public (p. 490). Similarly, planning for public forests has been characterized as wicked; indeed, Allen and Gould Jr. noted almost thirty years ago that “long-range forest plans involve power struggles, imprecise goals, fuzzy equity questions, and nebulous information” (1986, p. 23).

analysis of the situation. It demonstrates that a collaborative and iterative, or cyclical, process can ameliorate local problems of poverty, health, diet, and environment, while also emphasizing that there is no one final, ideal solution (Brown & Lambert, 2014; Brown, Deane, Harris, & Russell, 2010; Norton, 2005). That is, the WP framework directs our attention so that we can see complex, high-stakes crises in a more comprehensive light. Approaching our social messes² (e.g., the housing foreclosure crisis in 2008 or the inadequacy of the U.S. health care system) through this lens helps us to formulate a more inclusive and holistic understanding of the wicked problems we face. WP scholars foster comprehensive analyses of such situations by painstakingly evaluating the conditions under which problems become “wicked,” contrasting these with complex and simple problems (Batie, 2008; Norton, 2005; Salwasser, 2004). Thus, as illustrated in Table 1, wicked problems are distinguished from more manageable problems by

² When our problems are bound up with other complex situations and systems undergoing change and influencing one another, we have what Russell L. Ackoff dubbed in 1974 “a mess” (p. 21). According to Alpaslan and Mitroff (2011), “a mess” is “a system of ill-defined or wicked problems interacting dynamically such that no problem can be abstracted

from and analyzed independently of all the other problems that constitute the mess”; behind such complex and interdependent systems of problems lies our own “entangled web of stated and unstated, conscious and unconscious assumptions, beliefs, and values” (p. 27).

considering the extent of problem complexity, the degree of problem overlap, the level of uncertainties involved, the high stakes and magnitude of risk, the divergent set of values at play, and the subsequent limitations of expert knowledge.³

While simpler problems can be defined and resolved through individual effort alone, we see that wicked problems are not so clearly definable, nor amenable to isolated expert intervention, nor even resolvable in the traditional sense (Rittel & Webber, 1973). In addition, because such problems confront us with extreme levels of complexity and uncertainty as well as a conflicting list of objectives in high-stake situations, the outcomes of our efforts are often at least partially unforeseeable, and thus unpredictable (Turnpenney, Lorenzoni, & Jones, 2009). Since our initial efforts are likely to yield unforeseen consequences, iterative processes provide us with opportunities to respond more quickly and reflectively to a situation as it unfolds. David Freeman (2000) concludes that work on such problems must involve the mobilization of people in their communities, engaging in the deep dialogue necessary to integrate science with local knowledge, ethics, and politics; in the end, such processes seek to put all the stakeholders “to work” in order to generate effective change (p. 485).

The Dimensions of Wickedness: Assessing Initial Market Impacts

Growing, processing, transporting, and selling food involves heavily complex, deeply intertwined systems and networks, so much so that effecting change in one arena tends to tug on innumerable strands connected to many other issues, shifting and shuffling the situation for many others.⁴ Nelson and Stroink (2014) describe issues of food production, access, and transport, as well as consumer affordability and producer incomes, as complex adaptive systems that overlap—and interact—with other systems (economic, political, health, etc.). This means that effective and equitable

change requires communication across many perspectives as well as the integration of a wide array of information with the range of values involved. The growth of interdisciplinary literature on wicked problems offers a number of helpful methods, tools, and recommendations from which to consider our approach. The following sections highlight how the DTM is a response to the various dimensions of wickedness this area of Grand Rapids is facing, and how it thus aligns with and deviates from recommendations given in the literature.

Extreme Complexity and High Stakes

When confronting wicked problems, there are no guaranteed or standard procedures for ameliorating the situation (Thompson & Whyte, 2012). With over US\$30 million invested, the stakes for the DTM and its investors are significant. While attempts to quantify the risks involved in this venture were pursued through the DTM feasibility study, the WP framework suggests such studies can only offer a limited guide to action because they do not address all the dimensions of the issue (e.g., the entire range of uncertainties, the inconsistent set of needs and preferences, the conflicts in values, the changing conditions, the full dimensions of potential impact).

Adding to the complexity and the high stakes in this context, the community surrounding the Downtown Market faces a long list of challenges. For instance, the feasibility study briefly highlights issues of perceived safety in the neighborhood. The site is on the far edge of the Heartside neighborhood, which has the highest crime and poverty rates of all Grand Rapids neighborhoods; it has a 38 percent minority population and over 75% of adults (18 to 64 years old) live in poverty (Community Research Institute, n.d.). Indeed, the only homeless shelters and soup kitchens in Grand Rapids are in this neighborhood. Other human services in the neighborhood include medical clinics, daytime warming and cooling shelters, and

³ There are, in fact, no single, ideal solutions when confronting wicked problem situations; at best, we can only hope to find a temporary balance among competing goods for a limited period of time (Norton, 2005).

⁴ Raj Patal's *Stuffed and starved* (2012) reads as a seemingly endless list of examples of how various individual, institutional, and/or governmental decisions related to food production often result in widespread suffering.

a large number of single-person subsidized housing units. Adding to the area's reputation, prostitution and drug dealing are common. This situates the DTM in an area experiencing a long list of wicked problems, such as poverty, crime, addiction, and homelessness, and thus also higher levels of health challenges and food insecurity.

In partial recognition of these community issues, market vendors, employees, and community partners have initiated and participated in a number of efforts to support residents. For instance, scholarships that include the cost of a seminar, transportation, and a fresh food coupon are being offered to low-income individuals for a selection of culinary and nutrition classes. Another program, Double Up Food Bucks, is administered by the Fair Food Network to provide incentives that encourage healthier choices for SNAP recipients while also benefiting farmers and the local economy (Double Up Food Bucks, 2014). For every dollar spent on Michigan-grown fresh fruits and vegetables using Electronic Benefit Transfer cards at the market, the Double Up Food Bucks program provides SNAP recipients with a matching dollar in funds. In addition, neighborhood perspectives have been solicited through the formation of an advisory board that includes directors of two homeless missions.

Partial and Conflicting Perspectives

Another consistent error when confronting WP situations is failing to understand a problem in its full scope. We can, for instance, point to problems we face that are due to a narrowly framed focus on cheap and abundant food production, such as soil erosion, desertification, and health problems related to pesticide use (Brown et al., 2010). By focusing almost exclusively on our institutional agenda, we close ourselves off from insights of other stakeholders and implement plans framed too narrowly. According to Brown and Lambert (2013), we need to utilize a wider array of "knowledge cultures," including individual,

community, specialized, organizational, holistic, and collective knowledge cultures (p. 22). Rather than integrating across knowledge cultures in order to form a "collective understanding" (p. 4), there is often a tendency to demean and reject other forms of knowledge. Through a WP framework, we can ask ourselves who gets to name the problem, define the objectives, evaluate the options, make the choice, judge the results, and bear the risks (Ramley, 2014).

In the case of the DTM, the potential for economic gains has resulted in gentrification and the marginalization of neighborhood residents. As illustration, the market feasibility study indicated there was little demand for the market within a one-mile (1.6-kilometer) radius of its location; to be precise, over 50% of the demand was expected to come from residents living more than 5 miles (8 km) away and/or from tourists (Market Ventures, 2010). The feasibility study language emphasizes the goal of catalyzing "redevelopment around the Urban Market" (p. 2) with the hopes of influencing "downtown revitalization" (p. 5). Developers are adding 312 apartments and 33,000 square feet (3,066 square meters) of retail space in 13 new and renovated buildings in the neighborhoods closest to the Downtown Market (Schneider, 2012).⁵ Additional infrastructure developments that support the DTM include the city transit agency's new US\$39.8 million rapid transit bus line that will bring suburban passengers to downtown much more quickly than traditional buses (Schneider, 2012), as well as improved streetscapes immediately surrounding the DTM, including brick street pavement and sidewalk repair and beautification.

While the feasibility study highlights the benefit of bringing culturally appropriate foods to the area (Market Ventures, Inc., 2010, p. 13), this is put into question by the artisan-style vendors currently in place. Addressing the necessity of supporting and mediating structures, Grand Action founding member David Frey said in 2010 that "we have to be sure the surrounding area is developed with

⁵ While the market has not been the cause of all of the development in the neighborhood, it has spurred revitalization of the long-neglected area. Just across from the market are the Baker Lofts, one- and two-bedroom apartments for low-

income residents completed and opened in 2013. The building also includes 15,000 square feet (1,394 square m) of retail space for restaurants and shops (Michigan Housing Locator, 2014)

activities compatible with an urban market and not have a contrary purpose or intent” (Wood, 2010, para. 7). Illustrating this point, he adds, “the nearby K[illing]man’s and Baker Furniture buildings would have to be developed in an architecturally- and content-compatible manner” (Wood, 2010, para. 7). In addition, officials have provided new “security ambassadors” as well as an increase in security patrolling in the area. Perceived safety concerns have likewise led to the fencing off of a street overpass adjacent to the DTM that was historically used by the homeless (Vande Bunte, 2013). This purposeful effort to create an environment that feels safer for DTM customers traveling to the neighborhood reinforces the exclusive nature of the objective-setting processes and ultimately has weakened relationships with the surrounding neighborhood. It has also led to critique of the DTM as a gentrifying force.

In fact, concerns about gentrification have been corroborated by the Community Care and Enrichment Team (CCET), a long-standing community group designed to empower residents to improve their neighborhood through giving them a voice and supporting tools to change the neighborhood health environment. Informal discussions held with the CCET provide extensive anecdotal evidence that the DTM has not fostered an inclusive culture of working with neighbors and residents. The most frequent comment expressed by CCET members is that those behind the DTM “are trying to move us out of the neighborhood.” Similarly remarks such as “there’s nothing for me here” or “I can’t afford to buy anything” were common. Other neighborhood residents expressed concerns about being ignored by vendors and being made to feel unwelcome by the roving security personnel. These concerns highlight a feeling of displacement that is in stark contrast to the primary goals of food innovation districts: encouraging community and place-based benefits (Cantrell et al., 2013) and creating a “more equitable food system that values...healthy food access” (PolicyLink, 2014, p. 1). These findings also challenge the DTM’s stated intention to “stay true to our neighborhood roots” (Downtown Market, n.d.b, para. 1).

On the other hand, community leaders state

that the DTM is meeting its intended goals. For instance, David Frey of Grand Action stated that the DTM is “support[ing] agriculture,” (Kackley, 2014, para. 1), growing “small businesses and clean[ing] up a Grand Rapids neighborhood that had been badly in need of improvement” (Kackley, 2014, para. 2). The executive director of a local nonprofit pointed out that prostitution has declined in the area, and a developer of nearby housing and retail stated that the positive impact of the DTM cannot be ignored (Kackley, 2014). Behind the divergent perspectives described here lie long-term systemic divisions and isolation, with widely different perspectives on what “success” is. For the economic developers success is found through gentrifying the area, through economic prosperity and image rehabilitation; for neighborhood residents, these same end-goals are exclusionary, immoral, and unjust.

Isolation, Exclusion, and a Tension in Values

Rejecting the notion that there is an ideal solution, while at the same time recognizing both the need for progress and the unavoidability of trade-offs, the WP literature recommends putting an emphasis on the *people* involved, not the initial conflicts (Allen & Gould, 1986). Effective collaborative efforts respect the views at play, resist privileging any one point-of-view, and recognize the value of conflict as a source of learning. Conflict points stakeholders toward the inherent tensions involved in the situation, its paradoxes, and the underlying assumptions; thus, conflict has the potential to lead individuals away from narrow and insular, self-promoting plans and toward co-creative innovation.

The planning phases for the DTM indicate how it both met and failed to meet the criteria of equity and innovation. For instance, analysis indicates that the objectives for the DTM could have been better informed by neighborhood residents, broadening the scope and reshaping the intent and nature of the DTM itself, encouraging balanced objectives more in alignment with resident values and perspectives. One example illustrates this point: an advisory committee was appointed to provide community and vendor input during the planning process. This committee was almost

entirely composed of individuals representing institutional perspectives, with only minimal neighborhood representation. Beyond the initial committee meeting, neighborhood resident representatives were not included. Given this separation from the residents in the neighborhood, efforts could be characterized as *working on* this area, when the literature suggests efforts need to be directed towards *working with* those who will be impacted. In Grand Action's effort to revitalize this area of Grand Rapids and expand business and profit-making opportunities, resident concerns were neither comprehensively solicited nor addressed.

Since much of the decision-making process occurred from within institutional structures already in place and was thus fairly top-down, it failed to provide sustained, in-depth opportunities for inclusion. For instance, decisions made around what vendors to support, which employees to hire, and which products to carry can and do have direct impact on the local community (PolicyLink, 2014). Bryan Norton (2005) refers to this problem as one of "towering," which occurs when information is crafted and decisions are made in isolation, and when there are no networks and no outsider input. In general, a lack of sustained interaction between stakeholders creates and/or exacerbates "blind spots" which prevent or—at the very least—make inclusive, transformative opportunities for cooperative action fairly unlikely. Efforts to counteract this problem have begun, though these initiatives face an uphill battle. For instance, the DTM has had a difficult time reaching potential applicants for funded cooking and nutrition classes. Neighborhood residents are reluctant to apply and have expressed feelings that they will not fit in or feel welcome.⁶ An initially narrow focus on bringing in young professionals and tourists has exacerbated feelings by many surrounding residents of being pushed out.

The Market's Potential: A Discussion of Spanning Boundaries

The WP literature illustrates the need for

⁶ Taking this concern into account, the market has been encouraged to offer separate classes for scholarship recipients only that would use the foods and equipment available to

"boundary organizations." Such organizations intentionally seek to span boundaries by linking "suppliers and users of knowledge" and recognizing "the importance of location-specific contexts" (Batie, 2008, p. 1182). In general, boundary organizations operate by (1) inviting different perspectives into the dialogue, (2) holding themselves accountable to others involved, (3) generating new knowledge on the matter, and (4) communicating the knowledge to all stakeholders while actively seeking alternatives (Batie, 2008). In effect, boundary organizations seek to manage widespread, interconnected problems by turning them into intelligible messes (Alpaslan & Mitroff, 2011) through an iterative and collaborative experimental process of learning by trying. These organizations tend to operate as flexible yet stabilizing forces that bridge the gaps between various institutions, between theory and application, science and policy, experts and the people. Guston (2001) extends this argument, stating that boundary organizations consistently address real problems by living up to three separate criteria: (1) providing the space, the "opportunity," and often the necessary "incentives" for the work to be done; (2) engaging stakeholders from various sides of the issue and employing moderators or facilitators in doing so; and (3) existing "at the frontier of the two relatively different social worlds of politics and science" (p. 401). Without such spaces, there are few to no incentives either to foster interaction or to break down barriers. With such spaces, revitalization efforts may be successful at providing an improved space for all residents, rather than leading to displacement via gentrification.

On the one hand, extensive planning for the DTM indicates an awareness of the interconnected issues the area faces and an effort to integrate mixed-use space as well as income-conscious housing, which could lead to a positive outcome for existing residents (Ellen & O'Regan, 2011). On the other hand, many of these responses are top-down and exclusionary, seemingly seeking to drive out, not *work with* (Bridge, Butler, & Le Galès,

them, rather than what is commonly available in middle-income kitchens.

2014). This tends to cause a weakening of the social fabric in the neighborhood (Betancur, 2011).

The design for the Downtown Market, and the physical space it inhabits, are conducive to its ability to operate as a bridging force. As a food innovation district, the DTM places “related enterprises” near one another, reducing infrastructure costs, making “product and service gaps more visible,” and thus spurring opportunities for cooperation, competition, and innovation (Cantrell et al., 2013, pp. 6-7). For instance, the DTM has created a space for a wide variety of programs and institutions, including local universities, extension educators, nonprofit organizations, and a local school district. By doing so it is building the “extensive collaborative partnerships” across sectors, institutions, and communities that are necessary for addressing challenges (Ramley, 2014, p. 15). Consistent with the definition of a boundary organization, spokespersons for the DTM characterize it as an institution designed to “fill a variety of needs” and create “synergy” (Schneider, 2012, para. 4). Despite the already noted lack of sustained and in-depth neighborhood interaction in the creation of this space, a number of DTM initiatives show promise; in fact, a number of experimental practices aimed toward more widespread inclusion have already been implemented, including a gleaning program and the Food Works Initiative.

The gleaning program, focusing on food recovery, began in summer 2014 in order to collect donations of unsold fresh produce for redistribution in the neighborhood. Farmers selling produce at the DTM have been largely supportive, though some question why food should be “given away.” These questions reflect a high level of isolation between various stakeholders and thus limited awareness, a consistent factor in wicked problems. Encouraging positive interactions between neighborhood residents and sellers at the DTM could build cohesion across a broad range of diversity by “bring[ing] together groups that otherwise would have little reason or opportunity to interact: urban with rural, immigrant with native, old with young, black with white,” (Market Umbrella, 2012, p. 3) which can positively impact the social determinants of health. The gleaning program is intentionally bridging boundaries by engaging university

students, community members, nonprofits, local farmers, and DTM vendors through its initiatives. This work provides valuable resources, encourages healthy food choices, reduces waste, enhances education, enriches partnerships, and encourages civic engagement; that is, it intentionally seeks to ameliorate interconnected problems such as poverty, access, health, diet, and environment in the neighborhood *with* neighborhood residents.

The Food Works Initiative, started in January 2014, aims to grow a community of food entrepreneurs through the cooperation of locally owned “socially and environmentally responsible food businesses” (C. Lecoy, personal communication, May 22, 2014). This initiative brings together different organizations in order to provide the space and expertise for training, networking, “collaborative development, and ancillary resources” (C. Lecoy, personal communication, May 22, 2014). Food Works trains inner-city residents interested in developing their own businesses.

Initiatives such as the gleaning program and Food Works encourage individuals to operate in boundary-spanning roles by using limited resources creatively, managing bureaucratic channels effectively, and facilitating collaboration across diverse communities. They demonstrate how DTM operators, through their initiatives, can commit to a more just and equitable impact on not simply the regional food system, but also the surrounding community (PolicyLink, 2014). While seemingly minor initiatives, both programs begin to foster relationships—build bridges—which encourage stakeholders to “rethink the nature of the work we do and the impact of our contributions” (Ramley, 2014, p. 9). As initial, experimental, and inclusive processes, they move the DTM in a fruitful direction.

Conclusions and Recommendations

In response to systemic towering and conflicting perspectives, the WP literature calls for bottom-up participatory tactics (Thompson & Whyte, 2012). A greater openness to “different ways of thinking,” along with imagination and creativity, receptivity to novel ideas, and a willingness to draw on a wider range of “intellectual resources,” are necessary (Brown et al., 2010, pp. 4–5). In addition, one

should aim for genuine inclusivity *from the beginning* (Bridge et al., 2014). The Downtown Market, created in large part from already existing relationships between wealthy industrialists and philanthropists, led to exclusionary problem-framing and objective-setting. That is, while the original vision for the DTM succeeded in creating a center for local food excitement, it failed to genuinely engage the surrounding neighborhood in either a deep or a sustained way. In addition, many of the DTM's current operations are not inclusive in the widest sense, because key stakeholder perspectives (i.e., that of neighborhood residents) have not been given serious weight. These exclusive processes have impaired subsequent efforts to generate more equitable and inclusive programs, weakening the DTM's ability to operate as a bridging force in the neighborhood. This does not mean, however, that neighborhood voices need to continue to be left out when judging the results of these efforts, nor when making future choices about various DTM initiatives, such as the requirements for scholarships or hiring practices that systematize reaching out to neighborhood residents.

The DTM could intentionally create a space for the local knowledge and values of neighborhood residents, incentivize their inclusion, and integrate their perspectives into future planning. In fact, inclusive participatory efforts are consistently emphasized within the WP literature as essential, though not sufficient conditions, for creating more just outcomes. Nelson and Stroink (2014) employ one such model in their own community, utilizing dialogic strategies from a world café and community-of-belonging model (Block, 2010). Similarly, Pine and de Souza (2013) suggest forming partnerships with communities experiencing food insecurity and using their voice to guide efforts toward changing the food system. Various facilitation processes are designed to foster such inclusive and equitable efforts, such as adaptive systems theory, strategic doing, soft systems thinking, experiential learning strategies, and Brown and Lambert's transformational learning for social change (2013). While a variety of different tools and recommendations can be found within each method, they all encourage an iterative and collaborative learning process that moves

stakeholders through a series of conversations focusing on what they should do, what they could do, what they will do, and when they will do it. These processes aim to expose a diverse and representative group of stakeholders to the complexities of the issues, and thus more holistically frame the objectives and evaluate the options. On this front, effective efforts on such problems must mobilize people in their community, encourage a dialogue that integrates general science with local knowledge, ethics, and politics, and put everyone "to work" to make real effective differences (Freeman, 2000). In alignment with our recommendations, these methods unanimously suggest that bridge-building work begin with collaborative framing of the problem so stakeholders can *together* frame the solutions; at the very least, such approaches force stakeholders to be more aware of—and honest about—the priorities they set, the trade-offs they choose to make (Brown et al., 2010), and the risks they ask others to bear (Ramley, 2014).

Our analysis additionally demonstrates that it is valuable to focus on the importance of perplexity, genuine cooperation, and the need to expand individual and institutional loyalties so stakeholders can more readily recognize the value of diverse perspectives and the challenge of meeting needs in conflict. That is, the DTM could be a venue for more deliberative and experiential processes of learning by trying; as various small start-ups and programs initiate new practices with community input in mind *and* as these programs evolve in order to better meet the needs of the community, more effective and just practices are likely to emerge (Fleck, 2009; Norton, 2005). Programs that utilize cooperative, experiential learning strategies with a diverse range of stakeholders can open space within which participants can together modify current, dominant, unjust systems (PolicyLink, 2014). While wholesale solutions, shared values, and a unified vision are elusory, spaces for common ground and shared ownership—for connected values across differences—can be found when incentives are created to do so.

In fact, on many levels the DTM is already experimental. As one idea fails to bear fruit, another strategy is employed. For example, since initial efforts at recruiting neighborhood residents

for culinary and nutrition classes were largely unsuccessful, separate classes for scholarship recipients were planned in order to enhance their degree of comfort with the classroom experience. The DTM's initial operations have confronted employees with high levels of perplexity and many have responded by seeking out the perspectives of local nonprofits and community leaders, gathering their advice in order to develop new (and reshape existing) programs that are both more intentionally framed around social justice and more widely inclusive. For instance, when the DTM offered scholarships for healthy living classes, applicants were few in number. Program managers then sought out those familiar with intended scholarship recipients for advice on why individuals were not applying. In response to what they heard, program managers not only implemented suggested changes, but also made the DTM kitchens available at no cost to nonprofit agencies desiring to hold classes for low-income residents.

Thus, we conclude that the DTM should do more to provide the space, opportunities, and incentives to bring different people together; by doing so it will become a stable, flexible force for equitable change. We recommend that the DTM expand on its efforts to reach out to neighborhood residents, asking for and trying to understand their vision and values; by working more intentionally *with* the surrounding neighborhood, more comprehensive and inclusive plans can be implemented, moving the DTM away from programs that seek to work *on* or *for* others, and toward a process of working *with* them.

These same recommendations are valuable for anyone seeking to redress systemic, local wicked food problems, including food system developers, policy makers, and researchers. In general, through our analysis we recommend that people in these roles can more effectively foster equitable, just, and systemic change by framing their work through a wicked problems lens. This lens helps to counteract tendencies towards narrow, institutionally driven, top-down decision-making processes that fail to include input from those affected. There is now, for example, federal funding available through the Healthy Food Financing Initiative to put in shelving and refrigeration at corner stores so

produce can be stocked (U.S. Department of Health and Human Services, Office of Community Services, 2011). But the question of whether women (the more common purchaser of groceries) will change their shopping habits to buy produce from those stores has yet to be answered.

In general, if a community is working to develop an innovative food hub or local farmers market, concerted effort is needed to ensure that members of each potential stakeholder community are included in the development and implementation of decisions affecting their community. This includes neighborhood residents, new populations the DTM is hoping to attract, and vendors, as well as investors. Under the current DTM management structure, a more inclusive advisory board could be developed to obtain feedback on issues and ideas. In addition, actively seeking out community residents to fill employment vacancies at the DTM and listening to their voices is likely to provide a deeper understanding of issues as well as build relationships between the DTM management and the community. Our findings suggest it is imperative that ideas are solicited and decisions about the likely actions of the DTM (and the reasons for those actions) be explicitly and continually communicated. Ramley (2014) suggests that those within the middle of even traditional, hierarchical organizations can still often find ways to work collaboratively across differences and within the community. They can do so by staying “alert to system dynamics,” remaining flexible, recruiting others, facilitating interactions, and finding “support and solace” with those also seeking change (Ramley, 2014, pp. 17–18).

Additional research regarding the potential for new urban food markets to become gentrifying forces is necessary, as are approaches that work with community residents in order to minimize negative impacts. Approaching issues from a WP framework encourages the development of markets intentionally designed to operate as bridging forces across our political, moral, epistemological, economic, and institutional divides, so that we can cooperatively and intentionally work toward a more just and healthy future. 

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