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**Satiating the Demand: Planning for
Alternative Models of Regional
Food Distribution**

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Abstract

Problem: Planners need knowledge of food distribution organizations to operationalize the food distribution prescriptions found in recent APA publications on the food system.

Purpose: The research identifies and describes the various models of regional food distribution and advises planners about how to implement APA recommendations for forging resilient and sustainable distribution systems.

Methods: Working with the USDA, the Community Food Security Coalition and the Wallace Center we conducted a comparative case analysis of 60 local food organizations to identify successful models of food distribution.

Results and conclusions: We discovered and exemplify six models of mid-tier regional food distribution in operation around the country. We found that all six embed values congruent with those expressed in the APA guide to Community and Regional Food Planning. Further, we found that the range of operational models and variability *within* each model indicate how regional food distribution organizations serve the diverse logistical needs and market niches of local growers and wholesale buyers.

Takeaway for practice: Distinct planning skills can improve the design of regional food systems to increase efficiencies, structure an inviting regulatory climate, and serve the public interest. We identify three broad planning interventions, conducting infrastructure inventories, fostering regional development of allied industries, and realigning regulatory policy to support small and midscale production and distribution. These recommendations are congruent with APA publications on food and we make numerous specific recommendations for action in each.

Keywords: Food systems, distribution, value-chains,

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INTRODUCTION

That food systems are integral to planning dates back to the 19th century as noted in Howard's *Garden Cities for Tomorrow*. Yet, Pothukuchi and Kaufman (2000) point out that the planning profession has, until recently, largely overlooked food systems even though food systems bear directly on the public interest and are closely connected to many established planning arenas (e.g., land use, transportation, economic and community development planning). Today, the planning profession is responsive to the growing local food movement—the demand for good quality, healthy food closer to home, and to food systems planning more generally.¹

The 2007 *APA Policy Guide on Community and Regional Food Planning* proposes two overarching goals that integrate planning practice and professional values in support of the food system:

1. Help build stronger, sustainable, and more self-reliant community and regional food systems and,
2. Suggest ways the industrial food system may interact with communities and regions to enhance benefits such as economic vitality, public health, ecological sustainability, social equity, and cultural diversity.

In this article, we advance this discussion, extending the values and analysis presented in the policy guide to a largely underrepresented component of regional food system planning: wholesale food distribution. Distribution surfaces throughout the policy guide, exemplified by specific policy #4A that says:

Planners [should] support the creation of community and regional food systems linking production, processing, distribution, consumption, and waste management to facilitate, to the extent possible, reliance on a region's resources to meet local food needs.

However attractive this idea, two questions are clear: are there models suited to distribute food grown close to home, and further, what can planners do to support those models?ⁱⁱ

We address these questions by describing emergent models of wholesale food distribution that have garnered less attention than their counterparts in production.ⁱⁱⁱ First, we review how planning is implicated in the food system with particular attention to the congruence of planning values with alternative food system values and their associated implications and opportunities for food system practice. Second, using research predominantly produced by the University of Wisconsin Center for Integrated Agricultural Systems (CIAS), we describe six operational models employed by mid-tier alternative food distributors. Third, we exemplify changes in food distribution by discussing the experience of a particular organization and how it transformed itself to better fulfill its organizational mission as well as objectives consistent with those of the APA food planning policy guide. Finally, we propose three ways in which planners can employ their distinct and diverse skill-sets to develop regional wholesale food infrastructure and, in so doing, build “stronger, sustainable, and more self-reliant . . . regional food systems.”

VALUES DRIVEN FOOD DISTRIBUTION

The planning field rediscovered food a decade ago.^{iv} Today, thanks to planners who have championed food security and public health, issues such as food quality, affordability, and accessibility

are priorities in planning documents and city pronouncements around the country.^v Practices characteristic of alternative and sustainable food systems, such as the integration of various farm types and farming practices and the creation of new methods of moving product to consumers, advance the values and objectives of both food systems practitioners and planners by improving access to healthful food while helping to foster environmental sustainability and social equity.

By identifying the values built into alternative food systems; and by utilizing the local scale to strengthen relationships throughout the regional supply chain, planners can promote the “relational local” (as juxtaposed with “industrial local”^{vi}) approach to distribution by developing *value chains*.^{vii} The relational local readily admits a values-based approach to distribution. The same values inherent in direct producer-to-consumer transactions such as farmers markets and Community Supported Agriculture (CSA) also found production practices including organic, hormone/pesticide free, and fair trade in response to market opportunities or competition. However, value-based food supply chains are more difficult to implement as supply chains lengthen and transactions become increasingly “arms length.”

Contrast a supply chain for apples with a values chain for apples. The supply chain is often controlled by a single profit-maximizing company that internalizes relationships with growers and field laborers, packing and grading houses, value-added processors, distributors/marketers, grocery retailers and institutions such as schools and hospitals, all toward maximizing profit. By contrast, a value-chain incorporates distinct organizations with similar values to secure market share by embedding a variety of values throughout the chain (e.g. grower and worker parity, environmental stewardship, and retaining regional food dollars). Planners will recognize the market and non-market values, but can see the variety of objectives attainable through organizing values chains.

Over the past several years, a growing number of case studies have investigated the inner-workings of community food systems and regional food distribution networks.^{viii} However, this work

has focused on farmers markets, CSAs, and other predominantly farm-direct distribution methods, with few peering into the “black box” of regional wholesale food distribution.^{ix} But the federal government and national non-profit organizations are increasingly concerned with supporting a range of distribution mechanisms,^x and the idea to research this emergent system was born.

NATIONAL CASE STUDIES AND THE BALDWIN LOCAL FOOD DISTRIBUTION PROJECT

In January 2008 the Center for Integrated Agriculture Systems at the University of Wisconsin initiated the Baldwin Local Food Distribution Project as part of a decade-long endeavor to boost the Upper Midwest’s regional production and consumption of local food from 2% to 10% (Vandewalle & Associates). Although growers want to expand their local markets and many regional wholesale buyers, institutional food service operators, grocery retailers, and restaurants are demanding locally grown food, the present regional distribution infrastructure is oriented toward the industrial food system. As such, the Baldwin project identified a number of innovations to help scale-up food distribution at the regional level.^{xi}

Methods

Our comparative case analysis of mid-tier regional food distribution supplements the case studies dominating our empirical understanding of the food system. We selected six organizations from a database of approximately sixty local food entrepreneurs identified by the Wallace Center; the USDA Cooperative State Research Education and Extension Services Family Farm Forum webinars; and the 2008 Community Food Security Coalition conference.^{xii} This purposive sampling strategy enabled us

to identify a broad range of local organizations responding to the unique opportunities and barriers presented by distinct social, ecological, and economic environments.^{xiii}

We selected cases on three criteria: 1) representation of diverse locations, scales and forms of business organization; 2) emphasis on enterprises supplying primarily wholesale markets (e.g. grocery retailers, broad-line distributors, institutional food service operators, and restaurants); and 3) aggregation and distribution models that share the characteristics of values-based value chains, or “...strategic alliances that effectively operate at regional levels with significant volumes of high-quality, differentiated food products, and distribute profits equitably among the strategic partners,” (Stevenson 2009).^{xiv} In-depth phone interviews were conducted with CEOs or high-level managerial or marketing staff from each organization. Follow-up communications clarified and expanded on information that surfaced from the interviews.^{xv} (See table 1.)

Findings

We identified six operational models practiced by small- and mid-scale regional food distributors: the independent business, the nonprofit, the cooperative, the producers’ alliance, the produce auction, and third-party logistics orchestration. All six embed values-chain thinking in different ways discussed below. The range of operational models and variability *within* each model indicate how regional food distribution organizations serve the diverse logistical needs and market niches of local growers and wholesale buyers. Planners should not be surprised to find various models operating in their particular jurisdiction. Furthermore, planners should recognize that each model represents a particular intersection of the regulatory environment, the practitioners’ market, and the practitioner’s value orientation. The following models are examples of successful, regional wholesale food distribution, and so serve as prototypes for similar projects in other regions.

[Table 1 about here.]^{xvi}

Produce Auction

Produce auctions have long supported the small and local farmer in Amish communities throughout the United States as an efficient, low-infrastructure means of consolidating and distributing produce. Occurring primarily in rural areas with preexisting Amish populations, these auctions enable growers with no or limited refrigerated infrastructure to move variable volumes of fresh farm product shortly after harvest, thus reducing some health and quality concerns associated with the relative absence of chilled storage. Here in Wisconsin, the Badgerland Produce Coop Auction, developed with the support of county economic development planner Olivia Parry, is one of three produce auctions serving institutions, restaurants, and other buyers from around the state. A \$25 annual fee is charged to more than 600 buyers who choose from produce offered by more than 200 farmers. A small grant purchased a refrigerated truck to deliver sold produce. A fixed-price program is also offered. Other improvements in business structure, market access, and logistics through the development of virtual, urban, and/or transit-oriented auctions could improve the profitability of produce auctions for regional growers.

Nonprofit

Created to serve the public numerous nonprofit organizations have emerged over the past three decades to address, among other issues, questions of farmer parity, food security and nutrition, farm workers' rights, loss of biodiversity, and agriculturally produced ecological degradation.^{xvii} More recently, some nonprofits have sought to extend their mission by becoming *directly* involved in food distribution. Values-driven but (at least partially) revenues-funded, these nonprofits parallel a growing number of enterprises that straddle the historic divide between profit-oriented businesses and charitable

organizations.^{xviii} By reducing barriers to entry for new and vulnerable growers, fostering sustainable production through education and market development, and improving access to and affordability of fresh local product, nonprofits strive not only to address specific social and ecological considerations but also to contribute substantively to long-term sustainable regional community and economic development.

Cooperative

Cooperatives represent a time-tested model for community economic development. Designed to build ownership and maximize resources, such models are touted for requiring less external funding (i.e. government grants or private investment) than nonprofits and conventional business models.^{xix} Further, co-ops' assets-based approach to development fosters growth by leveraging existing community resources and distributing the cost of additional infrastructure across members. Our research uncovered distinct ways cooperatives organize food distribution. In one producer co-op, members share delivery and governance responsibilities while a full-time program coordinator administers orders, invoicing, and marketing. Another co-op, created as an adjunct of a consumer cooperative and natural foods retailer, operates a drop-ship program for local growers, outsources regional hauling, and has leveraged the values associated with natural food cooperatives to develop a "cooperative brand" for local products. The third, a producer cooperative governed by a producer-elected board of directors, hires professional management for its operations and uses production-based equity payments and end-of-season profit pooling to distribute risks and profits across its members.

Independent Business

Long the entrepreneur's organizational archetype, independent businesses have played an important role in the development of innovative and efficient regional food distribution. Adaptive,

market savvy, and privately held, successful businesses continually reposition themselves to improve efficiencies and fill market niches. Independent businesses *can* function as value chain partners but they may require additional time building relationships with value-chain partners and realigning their profit expectations.

Third-Party Logistics Orchestration

Third-party logistics providers (abbreviated TPL and 3PL) are firms offering outsourced logistics services to companies for all or portions of their supply-chain management. These providers usually specialize in integrated warehousing, transportation, and inventory services scaled and adapted to supply-chain partners' particular needs (Hertz; 2003). Some values-driven, regional distributors are discovering that outsourcing hauling and/or logistics enables them to focus their resources on targeted marketing, branding, and relationship-building with supply chain partners.^{xx}

Producers' Alliance

The Producers' Alliance model shares characteristics of producer cooperatives but requires less formal member involvement in organizational governance. In this model, product is distributed and marketed under a single brand owned, managed, and marketed by an independent business, nonprofit or hybrid. To join the alliance, growers typically sign a Memorandum of Understanding for delivering product to the umbrella brand. Participating growers may range from formal cooperatives to farm clusters to independent farms. The producers' alliance model balances product safety and quality while limiting the logistical and operational requirements of producers.^{xxi}

Discussion

In summary, these operational models represent strategies for aggregating and distributing fresh

farm product in various ways to distinct wholesale customers. Some models utilize familiar and formalized organizational structures while others appear *ad hoc*, but are in fact, structured, hybridized, responses to particular goals and contexts. Rather than viewing the models as discrete, it is useful to understand how they might interact to form clusters or nest one in another. For example, produce auctions and growers' alliances could operate under the guise of various business structures (e.g., independent business or nonprofit). Likewise, any of the aforementioned models could incorporate attributes of third-party logistics. Determining an appropriate structure involves knowing the particular goals, assets, and needs of a given farm product, farmer constituency, market, and region.

These models reflect the breadth of values and objectives driving the development of regional food systems (e.g., farmer parity, community economic vitality, ecological sustainability, social equity, public health, and profitability). The following example illustrates how internal factors such as a business's or organization's social and economic values interact with external factors such as market constraints and opportunities to shape a successful, mid-scale regional distribution model. Though this example focuses on market forces, other external social and ecological factors impacting regional food distribution might include topography, seasonality, growing conditions, land values, regional agricultural history, population density, work force characteristics, and labor availability.

A program of the advocacy organization Community Alliance with Family Farms (CAFF), Growers Collaborative (a nonprofit distributor) helps connect small and minority farms with regional institutions seeking local product. Recognizing a need (reducing barriers to entry for certain constituencies of growers), Growers Collaborative, (GC), leveraged its assets (affiliation with a reputable nonprofit, and an established network of regional growers) to build a regional wholesale distribution network. However, the organization had limited financial resources, lacked physical infrastructure, and was largely unfamiliar with the wholesale distribution business. Initially the organization made costly investments in delivery vehicles, but then realized they were unlikely to

capture 20% of the purchases of even the region's best funded and most ideologically aligned institutional buyers.^{xxii} With broadline distributors such as Sysco dominating the regional institutional food service market, GC was forced to reevaluate its business plan and organization.

Growers Collaborative reorganized itself to specialize in aggregation and marketing elements of the value chain by consolidating, packing, and branding product under the *Buy Fresh Buy Local* banner. GC captures profitable returns for its growers in two ways, first, by adding value through packing and branding, and second, by differentiating themselves from other suppliers and aggregators by offering broadline distributors palletized product, thus eliminating the need for distributors to source unconsolidated product from farmers markets. This reorganization and redeployment of assets is in keeping with GC values of connecting small (including minority) farmers to larger markets. As a result, regional broadline distributors will effectively function as TPLs for the Growers Collaborative by utilizing the efficiencies of their scale and business model combined with their connections to institutional buyers to move more local food to market, while preserving the pricing that make wholesale markets profitable to local growers. In sum, this reorganization positions Growers Collaborative as a distribution partner rather than a competitor—transforming fresh product from small farms into fully traceable, branded, palletized goods that are competitive in the food service market.

This values and value-added approach enhances both product marketability and growers' bargaining power, transforming this part of the supply chain into a value chain.^{xxiii} Additional plans to improve internal efficiencies by training growers on pack-size, pre-season planning and calculating cost of production will further strengthen the value chain by improving product consistency, profitability, and alignment of supply and demand. Regionally active broadline distributors are effectively functioning as TPLs for the Growers Collaborative by utilizing the efficiencies of their scale and business model combined with their connections to institutional buyers to move more local

food to market, while preserving the pricing mechanisms that make wholesale markets profitable to local growers.^{xxiv}

Food distribution is being reconstructed, reenergized by values that planners share. Planners, public and private, can learn from how Growers Collaborative developed an adaptive and effective regional distribution strategy.^{xxv} Planning professionals can assist other entrepreneurs, growers, and organizations strategically transform or realign to improve regional wholesale efficiencies, market access, farmer parity and food security. More broadly, these six models demonstrate the variety of paths to a more resilient food distribution infrastructure. Planners are well-suited to recognizing the particular assets or characteristics of distinct actors (as manifest in organizational structure as well as value and market orientation) and to create opportunities that interlock these various values and efficiencies to leverage the greatest number of community benefits—including those underscored as priorities in the APA food planning policy guide—economic vitality, public health, ecological sustainability, social equity, and cultural diversity.

IMPLICATIONS FOR PLANNERS AND PROPOSED NEXT STEPS

The reconstruction of regional food systems is underway, and largely without the involvement of professional planners. Distinct planning skills can improve the design of regional food systems to increase efficiencies, structure an inviting regulatory climate, and serve the public interest. Regional, comprehensive, logistics and freight transportation, public health, community, and economic development planners can all contribute to regional food systems planning. The uniquely interdisciplinary skill-set of the planner and our field's collective knowledge of both the systemic and particular nuances of the built, natural, and social environment make planning professionals well-positioned to expand the scope of the community food system beyond farmers markets and into the vital yet challenging new sphere of regional wholesale distribution. The following recommendations

specify further those in the *APA Policy Guide on Community and Regional Food Planning*, to show planners the next steps in providing a fertile environment for proliferating appropriate place-based food distribution networks that balance the social and ecological benefits of the alternative food system with the economic and scalar efficiencies of the industrial food system.

Conduct Infrastructure Inventories^{xxvi}

To strengthen existing regional food system infrastructure, we must first have a working knowledge of regional food systems' present assets and how those assets are interconnected. Regional food system inventories or asset-mapping (tailored predominantly to wholesale infrastructure and distribution) would significantly help with the practical work of rebuilding sustainable regional food systems. Inventories are used in many professional fields. For example, the Land Trust Alliance (LTA), the national authority on land trust standards and practices, requires Baseline Documentation Reports (BDRs) of all conservation properties prior to conservation transactions. BDRs document a property's conservation values and guide its management plan as stipulated by the LTA's code of ethical and technical guidelines (Land Trust Alliance). Likewise, energy audits, standard practice on the institutional scale as a precursor to energy efficiency facility upgrades, can identify the types of energy improvements that will yield the greatest return on investment. While distinct, these examples illustrate the broad range of application and referential weight given to inventories in fields utilizing baseline information to help preserve or improve upon the *status quo*.

An asset map would detail a number of features, including existing profit and nonprofit food distributors; food processors, the processing capacity of kitchen facilities at regional institutions such as churches and schools; freight transportation networks; temperature-controlled storage facilities; agricultural entrepreneurs, investors and loan guarantors; current and projected regional production

capacity; cooperative extension resources; grocery and retail outlets; and other high-volume local markets including prisons, school systems, universities, nursing homes, and corporate campuses. A baseline regional food system inventory would achieve the following goals:

- ❖ Help identify gaps and patterns within the current landscape;
- ❖ Provide for synthesis and opportunity development;
- ❖ Lend legitimacy to project proposals and funding requests that seek to strengthen and scale up sustainable regional food systems; and
- ❖ Serve as a yard stick, against which to chart and assess future progress.

The private planning firm Vandewalle & Associates of Madison, Wisconsin, funded by the Kellogg Foundation, has already begun working with colleagues at the Michael Fields Agricultural Institute, Blue Planet Partners, and University of Wisconsin-Madison to conduct a preliminary asset analysis of the Upper Midwest in conjunction with the Good to Grow Initiative.

Foster Regional Development of Allied Industries

Contemporary business literature emphasizes the distinct advantages of increased innovation, workforce development, and competitive edge associated with industrial clusters (Porter, 1998; Saxenian, 1994). Most famously illustrated by the wine consortium in northern California, “clusters are geographic concentrations of interconnected companies and institutions in a particular field” (Porter, 1998). Clusters encompass a variety of allied industries and related expertise and investment such as suppliers of specialized inputs (e.g., machinery, services, and providers of specialized infrastructure), trade associations, universities, and government institutions as well as financial institutions and investors (Porter, 1998). By fostering connectivity through trade synergy and geographic proximity,

clusters represent a means to achieve not only a competitive (inter)national advantage but also regional economic development. Clearly such clusters could include organizations using several of the models described above. Planner's expertise in economic development can play an important role in developing those organizations, and when needed, reconciling these various private and public purposes in institutionalizing value-chain characteristics into the relationships that constitute the clusters. Supporting independent businesses could simultaneously help fill gaps in regional food systems, build entrepreneurial capacity, and foster regional economic development.

One theme issuing from the case studies highlighted here was a need for greater investment in and development of allied industries, particularly small and mid-size processing infrastructure. Vegetable processors, once prolific across portions of the Midwest, have declined over the past three decades paralleling the consolidation of the industrial food system. (Hinrichs: 2007, 21) Likewise, many food service providers at institutions (hospitals, schools, universities, and prisons) interested in sourcing locally have lost their capacity to prepare fresh product. As a result, without sufficient, affordable processing infrastructure, growers and local food distributors are losing a significant portion of their potential market and palatable food is going to waste. In fact, in some instances, Baldwin interviewees reported that seconds product (i.e., blemished but nutritionally sound produce) was left to waste in the fields because growers' financial return from existing markets was lower than the cost of harvesting and transporting it.^{xxvii}

In southwestern Wisconsin, the Iowa County Area Economic Development Corporation (ICAEDC) (a 501(c) 6 organization dedicated to business development) is working to bridge this gap between supply and demand by partnering with a national nonprofit and local food entrepreneurs to develop a county-scale food processing cluster with several distinct products lines designed to serve the regional population and its visitors. The project, just now in its infancy, hopes to become a national model for small-scale community-led economic development and regional fair trade.^{xxviii}

Strategic development of cognate industries, such as processing, would support regional wholesale food distribution by advancing the following goals:

- ❖ Deliver more local product to larger volume regional markets;
- ❖ Enhance access to fresh and fresh-frozen local product for consumers in institutions such as schools and hospitals;
- ❖ Reduce food miles traveled;
- ❖ Retain more food dollars in regional economy; and
- ❖ Foster community economic development, which as distinct from “economic growth” is characteristically long-term, purposeful, and permanent and increases communities’ capacity to act and innovate (Shaffer et al.).

Planners should recognize that significant philanthropic and federal grant writing opportunities exist to establish new organizations and collaborative opportunities for existing organizations. Planners can help ensure successful applications by assisting organizations and alliances in integrating various elements of the food system appropriately in responding to various RFP guidelines. Finally planners can support research assessing these various initiatives.^{xxix}

Realigning Regulatory Policy with Small- to Mid-scale Production and Distribution^{xxx}

The present regulatory system is largely designed to ensure food and workplace safety by standardizing and monitoring the industrial food system. As a result, current regulations present numerous challenges to small- and mid-scale growers and distributors whose production scale and distribution range are often incongruent with the particular regulatory costs and procedures associated with their trades. Following the recent series of food recalls across the country, trade associations and

consumer advocates alike have become increasingly vocal about the need for food safety reform (Harris 2009). However, research indicates that regulations poorly tailored to small- and mid-scale enterprises are both inconsistently enforced and often inadequately implemented (Yapp: 2004). By partnering with state Departments of Agriculture, Trade, and Public Health, cooperative extension, consumer watchdog groups, trade associations, nonprofits and policy-makers at the county, state, and federal levels, planners could help facilitate the formation of regulatory framework that would achieve the following:

- ❖ Increase food safety and consumer trust in the regulatory system;
- ❖ Enhance interstate regional trade opportunities by fostering reciprocity agreements through which production and processing standards are streamlined or equivalencies are formally recognized as is the trend within some international food trade networks (Woolthuis: 2005);
- ❖ Leverage county, state, and federal economic development grants to help growers and processors cover the infrastructure costs associated with Good Agricultural Practices (GAP) certification, the development of Hazard Analysis & Critical Control Points (HACCP) plans, and mandated facility upgrades;
- ❖ Improve accessibility, clarity, and consistency of regulatory policy for emergent farmers and local food entrepreneurs and distributors through resources such as toolkits tailored to the distinct phases of a variety of regional wholesale supply chains;
- ❖ Improve small- and mid-scale food enterprises' regulatory compliance; and
- ❖ Invest in site planning, design, and other assistance to facilitate food distribution.

These recommendations, inventories and assessments, economic development and organizational design, and regulatory frameworks, are all represented in multi-disciplinary planning offices, both

public and private. Clearly planners have much to offer in this important element of food system practice.

CONCLUSION

Despite the relative absence of wholesale distribution in planning literature, emerging models promise to remake the relationship between growers and their regional markets. The research presented here is not a comprehensive analysis of regional wholesale food distribution. Rather, we have focused on connecting planners' skills and planning pronouncements with concrete knowledge of operational models we found remaking regional wholesale aggregation and distribution systems. Strategic planning will be necessary to avoid the pitfalls of the "local trap" and ensure that as regional food systems expand, they retain the goals and values outlined in the *APA Policy Guide on Community and Regional Food Planning*. The opportunities for planners to advance these objectives are numerous, and extend to virtually every planning sub-discipline. In particular, we underscore the contribution traditional planners can make by documenting existing wholesale food system infrastructure; by incorporating agricultural industry clusters into regional economic and community development planning; and by partnering with policy makers and food safety regulators through zoning and regulatory policy to foster regulation that both protects public safety and welfare while building the capacity and market access of local food entrepreneurs. Just as planners have incorporated environmental planning to professional practice,^{xxxii} they should also turn their attention to food distribution and the multiple means for moving food to fork. Food systems planning has covered much ground since its reintroduction to the planning profession nearly a decade ago, but as the local food movement expands, so too must the scope of food systems planning. As we look to the decades ahead, we urge planners to turn their attention to mid-tier regional food distribution and the multiple means of moving wholesale food to fork.

ACKNOWLEDGMENTS^{xxxii}

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- ⁱ APA *Policy Guide on Community and Regional Food Planning*; Raja et al.'s 2008 *A Planners Guide to Community and Regional Food Planning*, Planning Advisory Service; Morales and Kettles, *Planning for Markets and Merchants*, and *Planning Magazine The Food Factor*, August/September 2009.
- ⁱⁱ Models for regional and urban food production are better known as are the debates surrounding retailing food, especially in low-wealth areas.
- ⁱⁱⁱ The recent MacArthur Genius award to Will Allen of founder of the Urban Agricultural organization Growing Power and the stadium-size crowds author Michael Pollan draws exemplify the interest in agricultural production and consumption.
- ^{iv} Planners and allied professionals have made great strides reporting about the food system by documenting urban food systems (Cassidy and Patterson: 2008), assessing planners' knowledge and work with food systems (Pothukuchi and Kaufman: 2000), describing the growth of community-supported agriculture (CSA) schemas (Ostrom: 2007) and farmers markets (Gillespie: 2007), as well as documenting food deserts (Gallagher: 2006), regulatory developments (Morales and Kettles: 2009), and land-use consequences of urban and peri-urban agriculture (Kaufman and Bailkey: 2000). Simultaneously, community-scale food policy and planning have also gained momentum as evidenced by the proliferation of Food Policy Councils and Community Food Assessments (Pothukuchi: 2004).
- ^v See for instance the studies in the August/September issue of *Planning Magazine*, Seattle-King County *Acting Food Policy Council's* memo to the Seattle City Council found at <http://www.seattlepi.com/dayart/20080501/foodaccessmemo.pdf>, and Mayor Gavin Newsom's declaration of July 9, 2009 found at <http://civileats.com/wp-content/uploads/2009/07/Mayor-Newsom-Executive-Directive-on-Healthy-Sustainable-Food.pdf>.
- ^{vi} Referencing Michael Pollan's notion of the "industrial organic" (130), we suggest that the "industrial local" might privilege geographic proximity but still replicates problematic production, quality and access characteristics typical of the global industrial food system.
- ^{vii} Also described as "value networks," "strategic alliances," "value-added partnerships," "values-based supply chains," "integrated value systems," and "virtual integration," value chain refers to "long-term networks of partnering business enterprises working together to maximize value for the partners and end customers of a particular product or service (Lyson: 2007, 120)" and are typified by transparency, a commitment to the social and ecological welfare throughout the supply chain, and the integration of cooperation and competition to yield collaborative advantages in the market. (Lyson)
- ^{viii} See Barham 2008; Dreier 2008; Maye 2007; Starr 2003; and Zajfen 2008.
- ^{ix} Agricultural economist Ken Meter and colleagues conducted seminal research on the economics of regional food system development, which made a case for community-based food planning and predates these works. Refer to Meter and Pirog in references.
- ^x Notable treatments of regional wholesale food distribution are the Wallace Center's National Good Food Network 2009 Cluster Call series and the recent USDA publication "Emerging Market Opportunities for Small-Scale Producers: Proceedings of a Special Session at the 2008 USDA Partners Meeting," the latter examines different marketing and distribution channels for growers that ranges from direct farm-to-consumer to industrial.
- ^{xi} We think of scaling up as a functional attribute of a system that is enhanced by organizational characteristics. A system is scaleable in three dimensions, geographic, capacity, and by organizational design. Altering any of the three can produce scaling-up, (Morales 2009).
- ^{xii} Information for the case study on Good Natured Family Farms was compiled from secondary sources produced by colleagues at the Wallace Center. Due to the close alignment of research objectives and timeframe between the Baldwin project and this parallel study, we opted not to duplicate interviews with this subject. The Good Natured Family Farm case study fully complies with the selection criteria identified above and was produced from in-depth interviews with program personnel in 2007.
- ^{xiii} Several community-led cooperative wholesale food distributors (e.g. Blooming Prairie, North Farm) emerged in the 1970s and 1980s in conjunction with the rise of housing and natural food cooperatives in the Midwest. Detailed investigation of the rise and eventual consolidation and decline of these cooperative enterprises is not our focus, but it would make a valuable contribution to the literature and would be instructive to planners engaged in scaling up regional food distribution.
- ^{xiv} Due to the scope and objective of the Baldwin case studies, this analysis is restricted to the continental United States, disproportionately emphasizes produce over other farm fresh products, and does not closely examine ways in which large-scale, national distributors interface with alternative and regional food distribution. Further inquiry into these arenas would significantly expand our understanding of the contours of regional wholesale food distribution.
- ^{xv} A more complete description of our methods can be found at: <http://www.cias.wisc.edu/category/farm-to-fork/local-and-regional-food/>
- ^{xvi} Table 1 solely highlights the case studies that best exemplify the six distinct operational models that emerged from this research. For detailed information on individual case studies, refer to the CIAS and UW-Extension publication "Meeting the Demand for Local."
- ^{xvii} See for instance the University of Wisconsin Center for Cooperatives at <http://www.uwcc.wisc.edu/>
- ^{xviii} Described as the fourth sector or for-benefit organizations, see www.fourthsector.org
- ^{xix} Cooperatives may face certain competitive disadvantages in a tax and policy environment that overwhelmingly favors large, private firms.
- ^{xx} Other examples of this shift away from in-house hauling and logistics may be found in Steve Stevenson's Value chain case studies profile mid-scale food enterprise and in the Baldwin case study on Co-op Partners Warehouse, which has partnered with local hauler Edina Couriers to meet its refrigerated distribution needs throughout its five-state service region. While the distribution cooperative administers its own deliveries in the Minneapolis-St. Paul metropolitan area, its partnership with the courier allows it to spend less time on interstate logistics, freeing the cooperative to focus on its drop-shipping, marketing, and branding programs.
- ^{xxi} This model is illustrated by Good Natured Family Farms (GNFF) an independent business based in greater Kansas City, Kansas in Table 1. Appalachian Sustainable Harvest of Abingdon, Virginia (See Wallace Center) and Red Tomato of Canton, Massachusetts (See Stevenson) are two hybrid non-profit-businesses that use similar aggregation models to achieve wholesale volumes and co-branding. Like Good Natured Family Farms, these value-driven alliances share characteristics of cooperatives while hybridizing business models that allow for more flexible funding streams and organizational structures.
- ^{xxii} In this instance, 20% of the market was insufficient to enable GC to become financially self-sustaining. In other markets, a 20% market share may be sufficient to sustain a small or mid-scale distributor.
- ^{xxiii} Relative to more traditional thinking about community and regional food systems, which explicitly favors farm-direct sales and shorter supply chains, this reorganization (lengthening the supply chain) may seem counter-intuitive. However, Growers Collaborative scanned its context and connected with its values to discover its niche as a grower advocate, aggregator, and branding entity. Identifying their particular assets and opportunities to connect with supply-chain partners enabled them to better fulfill their mission than if they had continued as the sole intermediary between growers and the regional institutional market. Reinventing the organization is a risky undertaking, moreover in established industries. However, Growers Collaborative demonstrates that to minimize risks an organization builds on secure relationships, adopts cooperative relationships with other organizations, and aggressively pursues the values based organizational mission.
- ^{xxiv} There are a number of factors that constrain institutions' ability to purchase local product. For example, many mandated bidding processes privilege lower prices over locally or sustainably produced product; on-site food preparation is often associated with higher labor costs; and there is a decline in the number of institutional kitchens with the capacity to process fresh product due to a trend toward purchasing fresh-cut and fresh frozen product, which does not require on-site cleaning and chopping. Local food purchasing policies and changes in food service operations are starting to create more in-roads for local product, see the *Woodbury County Policy for Rural Economic Revitalization "Local Food Purchase Policy" Resolution*: <http://www.woodbury->

ia.com/departments/EconomicDevelopment/WC%20LPPP%20v3.pdf and “University of Wisconsin– Madison Dining and Culinary Services” *Scaling Up: Meeting the Demand for Local Food*: <http://www.cias.wisc.edu/category/farm-to-fork/local-and-regional-food/>

^{xxv} For a more detailed discussion of this example see “Growers’ Collaborative”, *Scaling Up: Meeting the Demand for Local Food*: <http://www.cias.wisc.edu/category/farm-to-fork/local-and-regional-food/>

^{xxvi} This suggestion further specifies Policy #1B-1 in the 2007 APA Policy Guide on Community and Regional Food Planning.

^{xxvii} Gleaning can take advantage of this food and planners can help establish partnerships to minimize food waste, see for instance the advice of the USDA, <http://www.usda.gov/news/pubs/gleaning/content.htm>, and the nation’s oldest gleaning network, <http://www.endhunger.org/>.

^{xxviii} Iowa County Area Economic Development Commission, see <http://iowacountyedc.org/125.html>.

^{xxix} This suggestion further specifies Policy #2D-1 in the 2007 APA Policy Guide on Community and Regional Food Planning. Energy audits for food, Policy #4B-2 is a logical extension of this interest.

^{xxx} This suggestion further specifies Policy #2C-1 and #5C-3 in the 2007 APA Policy Guide on Community and Regional Food Planning.

^{xxxi} There are noteworthy parallels between the present state of food system planning and the emergence of environmental planning. The late 1960s marked the realization of environmental problems that transcended traditional conservation efforts and with it, the birth of contemporary environmentalism. As environmental issues became publicly recognized and found political footing, a desire to give forethought to causes and prevent future problems followed. Planners moved into the field to lead variety of efforts at varied scales to anticipate, plan for, and mitigate environmental damages and protect critical environmental areas.(Born, Stephen) See also Daniels: “A Trail Across Time American Environmental Planning From City Beautiful to Sustainability.”

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Comparative Case Study Matrix of Six Operational Models for Local/Regional Wholesale Fresh Product Aggregation and Distribution

Enterprise	Co-op Partners Warehouse St. Paul, MN subsidiary of retail co-op, uses 3PL aggregator/distributor/branding www.cooppartners.coop	Fennimore Produce Auction Fennimore, WI auction grower/aggregator/distributor www.limslackauctionreality.com	Good Natured Family Farms Kansas City, KS farmers' alliance producer/aggregator/distributor/branding www.goodnatured.net/	Growers Collaborative Davis, CA nonprofit aggregation/distribution/branding www.growerscollaborative.org	GROWN Locally Postville, IA Producer co-op grower/aggregator/distributor www.grownlocally.com	Westcott Agri Products Elgin, MN privately held company grower/aggregator/distributor www.westcottorchard.com
Years in operation	10	2	12	5	9	35+
No. of Employees	29; 2 quality control; 9 warehouse; 6 drivers; 2 accounting; 2 buyers; 7 sales; 1 manager	1 full-time administrative program coordinator. The auctioneers are independent contractors.	N/A	9; 4 in Greater Los Angeles; 5 in the Greater Bay Area. Employees include drivers, operations managers, regional managers and a farmer outreach coordinator.	1 full-time coordinator	36; 1 CFO; 4 accounting and administrative staff; 1 operations manager; 4 account managers; 4 warehouse/distribution staff; 15 packers; 5 drivers; 1 production supervisor.
Product Offerings	Over 200 organic produce items as well as organic milk, cheese and yogurt, soy products, fresh juices and smoothies, sauces, deli items, condiments, dry goods.	Fresh produce, flower baskets, flower flats and garden plants. Special sales feature quilts, furniture, planters, decor items and machinery.	Beef, chicken, turkey, bison, pork, farmhouse cheese, honey, milk, eggs, fruits and vegetables, jams and jellies, and salsa.	Fresh fruit and vegetables, available seasonally. 100 products available in the summer; 30 products available in the winter. Sells both retail quality and processing quality produce.	Fresh produce and herbs, meat, honey, flowers, fruit and berries.	Tree fruit. Westcott sources regional varieties such as Honeycrisp when they are in season. However, in order to meet year-round customer demand for mainstream varieties, they also source varieties from Washington State and the Southern Hemisphere.
Grower Requirements	More than 90% of all product is certified organic. Co-op Partners relies more on transparency and relationships than GAP certification and HACCP approval with its local producers. It seeks fair trade product when organic is not available.	Product must be produced within 100 miles of the auction.	Producers are required to implement natural and organic farming practices. Growth hormones and sub-therapeutic antibiotics are prohibited. Meat producers must comply with a USDA Quality System Certification Program (QSCP) for small Livestock and Meat marketing operations. Poultry products are required to comply with a parallel QSCP for poultry.	Suppliers meet a range of production standards. Some are GAP and organic certified. The Collaborative audits all of its farms to ensure compliance with conventional safety and production standards. Buyers can review all of the Collaborative's farms and their growing methods on the Collaborative's website.	Mix of organic and uncertified "sustainably grown." Growers comply with GAP Well water tests are required of all on-farm washing facilities. While HACCP do not implement own manual of post-harvest handling standards which it is revising to better accommodate large-volume sales to institutions.	Westcott has GAP transitional certification and follows wholesale packing standards. It is working with a number of its growers to institute sustainable production practices that exceed industry standards. All production locations are inspected by independent, third-party certifiers.
Suppliers	Co-op Partners sources regionally and nationally, featuring products from over thirty Wisconsin and Minnesota producers. When regionally grown product is not available, goods are sourced primarily from California and Washington.	Any growers within 100 miles can bring produce to the auction. Suppliers are predominantly area Amish farmers. About 35 growers are represented at each auction.	75 farms within a 200 mile radius of Kansas City, KS.	25 in Southern California and 100 in the Bay Area. Farms range in size from 4 to 400+ acres.	22 member farms	25 regional producers growing 30 apple varieties, with additional growers in Washington State and the Southern Hemisphere.
Customers	Retail co-ops and Natural Food Stores throughout the Upper Midwest.	Primary customers include roadside stands. Secondary customers include grocery stores and food service buyers.	Balls Food Stores (Kansas-based regional grocery chain)	70 institutions, 40 of which are regular customers. These include public and private schools, colleges, universities and hospitals, as well as Meals-on-Wheels and other buyers.	Institutions (colleges, nursing homes, other?)	105 customers in a five-state region (WI, MN, IA, ND, SD). Their customer base is about 70 percent retail buyers and 30 percent distributors.
Pricing	Co-op Partners negotiates costs directly with local growers. Mark-up ranges from 16-25% depending on product perishability. Prices are set in advance or determined as needed.	Prices are determined by bidding.	Producers set the price. Good Natured Family Farms adds a mark up to cover packaging, labeling, administrative and marketing costs and then communicates the total price to Balls Food buyers.	Farmers set their prices which the organization is able to uphold because demand outpaces supply. Local food procurement comprises about 20% of most food service operators' total orders. The premium paid on that 20% is minimal relative to the marketing benefits gained from local food sourcing.	Co-op committees establish tentative prices based on past sales and cost of production. They recalibrate prices throughout the growing season, as needed.	Strong relationships and trust between Westcott and its growers are key. Westcott enters into season-long contracts with specific retailers and offers transactional pricing for other customers. Some contracts are for volume commitments only, with prices fluctuating with the market. Other contracts are for price and volume commitments.
Volume	~\$4 million of local product out of approximately \$13 million total annual sales.	About \$15,000 per auction. The auction company is presently seeking grant support for the auction, which is not yet financially self-sustaining.	N/A	N/A	~ \$100,000 in 2008	N/A

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