CENTER *for* INTEGRATED AGRICULTURAL SYSTEMS

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June 20, 2021

Dr. Melissa R. Bailey
Agricultural Marketing Service, USDA, Room 2055-S, STOP 0201,
1400 Independence Avenue SW,
Washington, DC 20250-0201.

RE: Docket Number AMS-TM-21-034

Dear Dr. Bailey,

The undersigned submit the following response to USDA's request for comments regarding the Executive Order 140147 on "America's Supply Chains" specifically for the Production of Agricultural Commodities and Food Products published April 21, 2021 in the Federal Register. The undersigned, at the request of farmer-partners, have worked on supply chains for local and regional food since 1995 at the University of Wisconsin-Madison. The Center for Integrated Agricultural Systems is a participatory action research collaboration between community partners and faculty, staff, and students at the University of Wisconsin and the College of Agricultural and Life Sciences (CALS). Grassland 2.0 is a multi-year USDA-NIFA supported project, led by the UW-Madison in collaboration with University of Minnesota and farmers, landowners, non-profits, local, state and federal agencies, focused on research and action to assemble the building blocks of ecologically, economically, and socially resilient agricultural systems, including specific work on developing supply chains to support agroecological transformation.

Farmers and their strategic business partners require government and public research assistance to make supply chains more resilient. This may be accomplished through attention to these critical factors: business scales in wholesale markets, regional differences in market density and food production capacity, and equity across the supply chain. Managing a nation's food system is an important government function that includes setting fair market rules, ensuring open information exchange, and managing risk in food supply chains. In this way, our government ensures equitable food and market access necessary for the health and wellbeing of the Nation. Updating market rules, and then monitoring and enforcing them, is a strategy that only the federal government can employ. New rules for 21st century conditions will allow the public sector to monitor the movement of goods and services and manage systemic risks across food supply chains, by analyzing food and information flow data.

Market rules:
An important government function is to manage fair markets for products that are essential to the health and well-being of the Nation. Business concentration hampers innovation in the food system - from seed production and land ownership to processing, grocery stores and waste management companies. Yet it is food entrepreneurs, who function at all points of the supply chain, and which form the backbone of urban, rural, BIPOC and immigrant communities. These independent businesses are responsive to changing local needs and conditions, build economic

capacity at the community level, tap into innovation to serve those needs, and give our food system accountability and resilience. They generate wealth.

A recent example of a food sector that was able to develop in response to changing community needs is the organic sector. In the 1960s and 1970's, food entrepreneurs responded to growing concern about pesticides in food and the need to protect the health of farm families and other food workers. Organic farmers and communities across the country developed small supply chains to create the organic food sector. This work took countless volunteer hours over many decades to achieve, and ultimately resulted in a network of independent businesses dedicated to continual improvement and local economies. But many founding businesses of the organic movement are concerned about concentration, as independent businesses are pressured to sell their operations to firms that seek to add an organic food line, such as Campbell Soup Company's purchase of Bolthouse Farms in 2012 or United Natural Foods predatory acquisition of cooperative distributors in the early 2000s (Rogoff & Glasmeier, 2014; Howard, 2016). Independent food companies like Clif Bar, Organic Valley, and Equal Exchange refuse to participate in the consolidation trend, and are investing in resilient supply chains by remaining independent and supporting other independent organic businesses.

Organizations such as the National Grocers Association (2021) and the National Farmers Union (2021) are calling for a check on supply chain concentration. The grocers group contends that the COVID-19 pandemic has further exacerbated market inequality and that their members—independent grocers across the United States—are disadvantaged in this hostile market environment. They provide evidence of buyer power and economic discrimination that threaten independent businesses and they call for investigations and hearings, oversight, legislation, agency action and enforcement. National Farmers Union has a long history of these concerns, as documented in their annual policy statements and numerous reports.

Market rules need to be updated so that they respond to the many technological advances of the last fifty years that have changed how food moves, how information flows through the food system and how the Nation responds to the risks we face in this century. New government rules to support competitive markets must be accompanied by systems-based monitoring and robust enforcement. Competitive markets are fundamental to food system resilience because they add redundancy to the food system through self-organization. That is, competitive markets are those that have the right conditions for new businesses to emerge and flourish in response to community needs.

Food flow:
Urbanization has had a profound effect on where and how food is grown and distributed. In the last hundred years, food production has shifted from a localized, highly diversified, and integrated system to one characterized by intensive, specialized production in specific regions that is then distributed through concentrated, vertically integrated companies. With some exceptions, the full suite of perishables in our diets is not produced in proximity to the eleven urban megaregions of the Nation (Aguilar, 2015; Dash & Rae 2016). Differences within and among these megaregions are considerable and each needs to be explored in terms of its unique food supply chains to build regional resilience.

Early observations indicate that each region in the US is likely to have a unique relationship between food production and consumption, as shaped by growing conditions, transportation routes, business relationships, and proximity to primary food system network nodes and capital. Empirical findings on food flow can be used to document COVID-19 impacts across the supply

chain, with emphasis on regional scale contributions to systems resilience (Center for Rural Engagement, 2020).

Information flow:
Information asymmetries have proliferated in today's era of big data. Information asymmetry—in which a few businesses have access to information and use that information to maintain and increase competitive advantages—undergirds supply chain concentration. Controlling information flow builds a positive feedback loop into the food system, widening the gap between those businesses that have information and those that don't have access. It is a fundamental structural weakness in the food system. It hobbles the ability of government and other actors to manage systemic risks holistically, leaving independent businesses especially vulnerable. Such asymmetry creates an unhealthy power dynamic within supply chains where independent businesses are dominated by larger and more vertically integrated operations that have greater ability to garner and manipulate system-wide information to maintain market control. Such an approach to supply chain information has created vulnerabilities that led to whole-sector meltdowns in 2020 (Hendrickson 2020, Pullman & Wu, 2021). Equitable access to information is necessary for more equitable, resilient, and responsive food supply chains. It also requires a public sector and policy commitment to support information access as a public good (Rissman et al. 2017).

In supply chains, businesses analyze consumer purchasing trends and manipulate wholesale distribution patterns to increase profits. Private companies have financialized and honed methods to scrape data from the internet and aggregate proprietary data from innumerable private market transactions. The private sector has also developed proprietary algorithmic models and applications to organize public and private data and discover patterns of behavior that can improve profitability for businesses, at least for those that can afford to pay for data and information services. Vertically integrated supply chains have the capital to do this, hence the largest grocery retailers in the country are already using blockchain technology to monitor and manage transactions. These complex digital business ecosystems are unique, the means they use to gain market power are misunderstood, and conventional competition analysis and remedies are inadequate (Moss et al. 2021). Amazon's entry into food retailing, especially with the purchase of Whole Foods, and now with its "dark-store" direct delivery business, is at the apex of digital business ecosystem development in the sector. Supply chains that are smaller and made up of many independent food businesses are at a considerable disadvantage (Navickas & Gruzaukas, 2016).

Determining the strengths and opportunities for each megaregion will improve our government's ability to target scarce public resources to address critical bottlenecks in processing and cold-chain distribution. It will help minimize the possibility for disruptions, such as those seen in the onset of the COVID-19 shut-downs. It will accelerate GHG reduction system-wide through innovations such as electrification of the trucking industry, improved refrigeration systems, and warehousing efficiencies. A regional food systems strategy will support entrepreneurial economic development in rural and urban communities to address climate change mitigation and adaptation.

Improving information flow is a high-leverage strategy to develop resilience in the food system. For a regional food economy to thrive, we need democratized information infrastructure that improves supply chain transparency, protects data, ensures affordable access to data and digital tools and allows for data portability to reduce information asymmetry. All businesses in a supply chain need access to the information in that chain, not only the businesses most able to pay for it.

Risk management:
Public policy makers need supply chain analysis to make informed decisions to *target public investment in structural improvements* that create resilience and ensure rapid recovery and continuity in national and regional food systems. Because this is a time of great disturbance in supply chains, the Nation has an opportunity to upgrade and reconfigure the food system infrastructure to address current inequities and in anticipation of future risks.

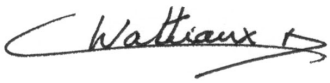
Investment in information infrastructure such as universal internet access, and open source and affordable digital tools is necessary. Information infrastructure targeted for independent businesses will reduce information asymmetry in supply chains. Cold chain warehousing can then be strategically located to support food movements tailored for regional needs. This will improve overall national food movements so that food distribution is better organized to serve rural and urban communities, and businesses of all scales. This is also a climate change mitigation strategy in that improving cold chain and distribution efficiencies will reduce GHG emissions.

Gaps in meat, poultry, and dairy supply chain capacity and agility became evident during the lock-down period of COVID-19. For example, when restaurants closed a surplus of meat was packaged in large quantities and labeled for distribution to restaurants rather than grocery stores. Similarly, a surplus of milk was packaged in small milk cartons for distribution to schools rather than grocery stores. It is necessary to invest in regional processing capacity and in facilities with more flexibility to quickly change product packaging sizes and be supported in their efforts to diversify their market streams.

In conclusion, strategic investments as outlined in this document will support competition in markets, entrepreneurial and wealth-building opportunities in the food system, and ultimately support an optimum level of system redundancy to avoid increased risk of complete shutdowns in the face of disturbance or shock. Such resilience is a matter of our national interest.

USDA must address information asymmetries that perpetuate concentration in agricultural supply chains as the *current primary point of leverage for change*. The need to ensure more equitable access to data and information is urgent and in the interest of national security, environmental efficiency, and the livelihoods of farmers their strategic business partners in independent food supply chains. We ask that resources be allocated and directed into research and development of the necessary supply chain infrastructure to ensure these important outcomes.

Sincerely,



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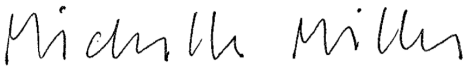

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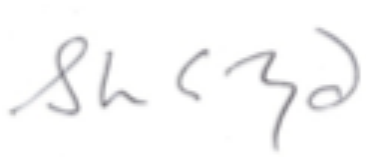

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