In It Together:

Examining the Role of Food Hub Networks in Supporting Hub-to-Hub Collaborations

The National Food Hub Survey is a longitudinal research project that seeks to identify trends in economic growth and viability, operational characteristics, and the impact of social mission in food hubs across the country.

This is one of three data briefs that more deeply explores specific topics from the 2021 National Food Hub Survey.

INTRODUCTION

Food hub networks are groups of food hub businesses and organizations that work collectively to share information or pursue common goals. These networks may be formal or informal and can span multiple counties, a state, or region.

It's unknown how many food hub networks exist in the United States, but there are several prominent examples in Michigan, Iowa, the Eastern United States, North Carolina, Colorado, Hawaii, and the Pacific Northwest, to name a few.

Author's Note:

The networks and activities described here do not represent all food hub network activity in the United States, only the network activity reported through the 2021 National Food Hub Survey. Also, because the survey was promoted through many state and regional food hub networks, these findings may overrepresent organizations that belong to networks.

While the social, economic, and environmental impact of the food hubs sector has been widely studied, research on the role and reach of food hub networks is limited. The 2021 National Food Hub Survey sought to capture, for the first time, the extent to which food hub organizations across the United States are engaged in food hub networks and the nature of their network activities. This brief presents data from the 2021 National Food Hub Survey with additional analysis to explore the role that networks play in supporting hub-to-hub collaboration.

FOOD HUB NETWORK PARTICIPATION

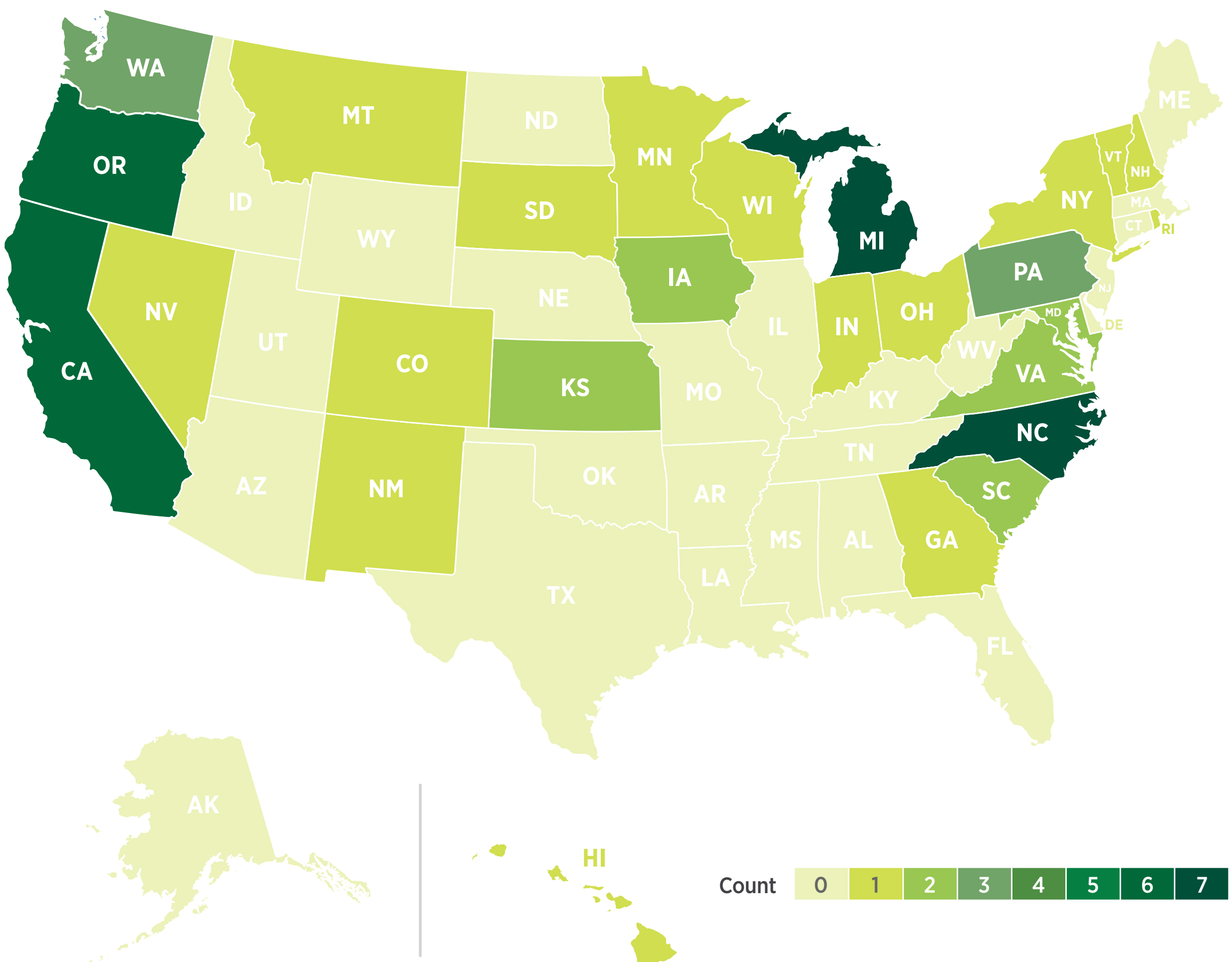
Results from the 2021 National Food Hub Survey indicated, first, that there are a large number of state and regional food hub networks across the United States, and, second, that these networks are active, engaging many food hub organizations and supporting a range of different activities. Networks also appear to be drawing a diverse range of organizations: participation was approximately even across organization types, scales, and business models. Only four of the 107 survey respondents reported being aware of a network but not participating.

In three states, 75% of reponding organizations reported food hub network participation.

Food hubs from 26 different states, one Canadian province, and Washington, D.C., reported participating in a network. One respondent in Alaska mentioned wanting to start a food hub network. While this reflects substantial geographic diversity, it is not clear whether these are state-based or multistate networks.

California, Oregon, and North Carolina were the states most strongly represented by food hubs participating in a network. In each of these states, at least 75% of responding organizations reported network participation and at least six different individual organizations reported network participation. Figure 1 shows the number of food hubs reporting network participation by state.

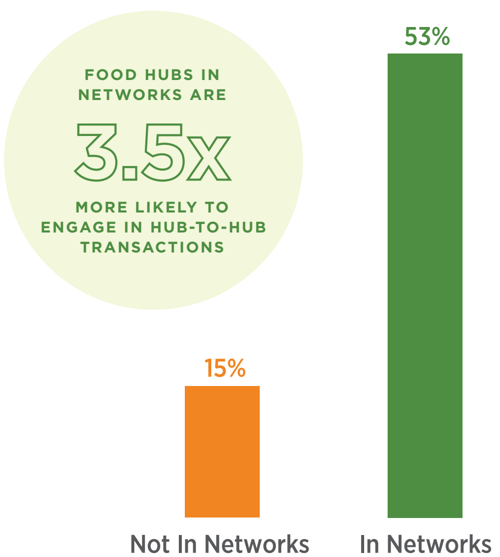
Figure 1. Number of Food Hubs Participating in Networks



HUB-TO-HUB TRANSACTIONS

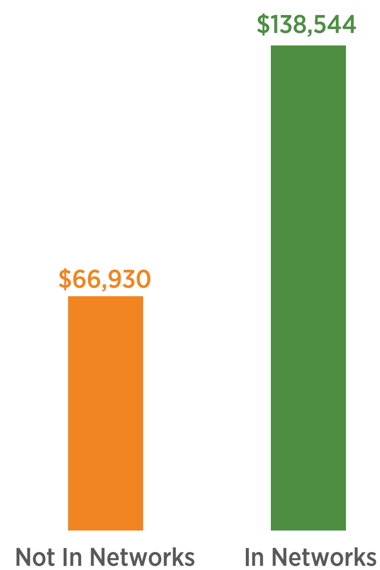
Hub-to-hub transactions were much more common among hubs participating in networks, with 53% of hubs in networks reporting hub-to-hub transactions compared to 15% of hubs not in networks (Figure 2). Among those who provided dollar amounts for their sales to hubs, the average among the organizations in networks was more than double that of the organizations not in networks (Figure 3). These findings suggest that networks are important spaces for fostering transactional relationships between food hubs.

Figure 2. **Percent of Organizations Engaging in Hub-to-Hub Transactions**



Note: *n* = 79.

Figure 3. **Average Sales to Food Hubs by Network Status**



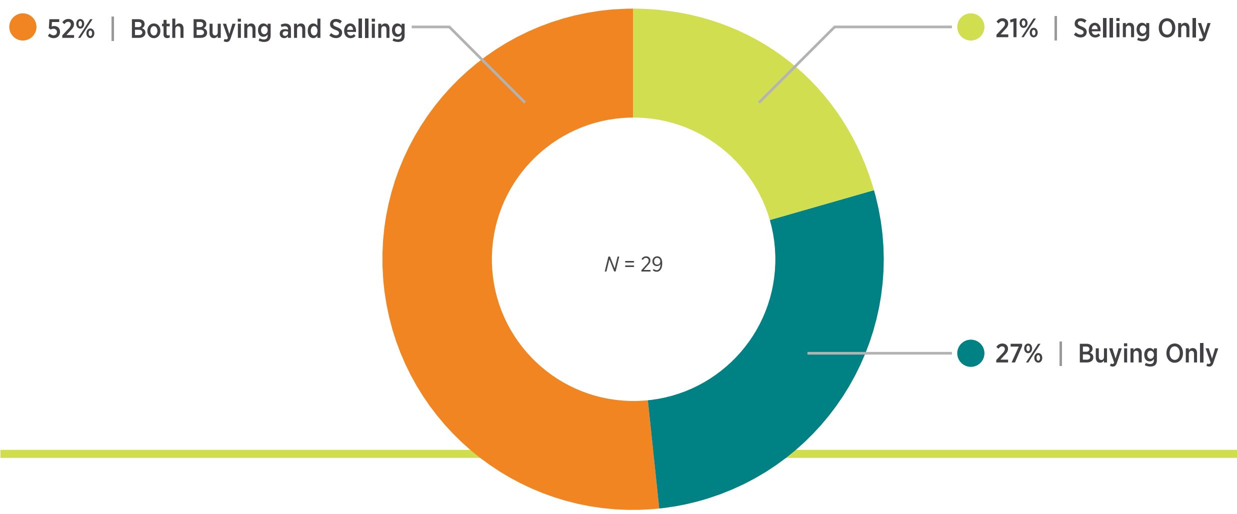
Note: *n* = 12 for food hubs in networks.
n = 2 for food hubs not in networks.

Within the 29 organizations that provided more detail on their hub-to-hub transactions, approximately half (52%) were both buying and selling (Figure 4). Nearly all (14 out of 15) the organizations that reported both buying and selling to other hubs also reported participating in a food hub network. This again suggests a relationship between network participation and hub-to-hub transactions.

The organizations that sell to other food hubs reported selling to an average of three other hubs (range of one to 10). The organizations that buy from other hubs reported buying from an average of 2.5 other hubs (range of one to seven).[1]

1 Eight people reported hub-to-hub transactions as one of their organization's activities but later in the survey said their organization was not buying from or selling to any other food hubs. This could reflect inaccuracies in the survey responses or that some organizations are transacting with other hubs for something other than food products.

Figure 4. **Percent of Hub-to-Hub Transaction Types**



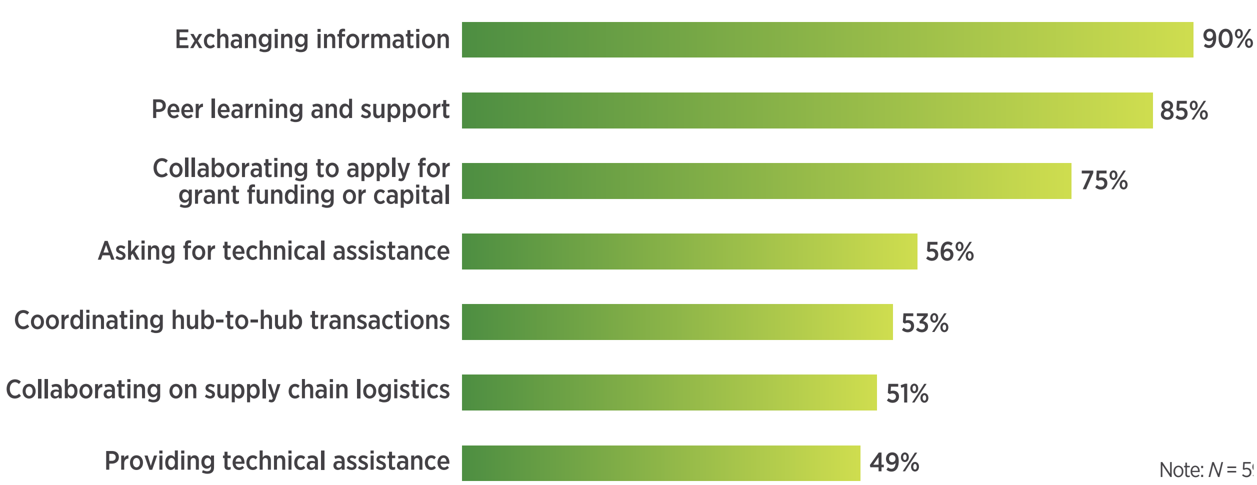
FOOD HUB NETWORK ACTIVITIES

Food hub networks appear to be supporting a wide range of activities beyond coordinating hub-to-hub transactions. Among the organizations indicating that they participate in a network, approximately half reported engagement in all seven listed activities, as seen in Figure 5. In written responses, two organizations mentioned engaging in policy advocacy through their networks, including advocating for food hubs in state government budgets.

75%

of organizations in food hub networks reported collaborating to obtain funding.

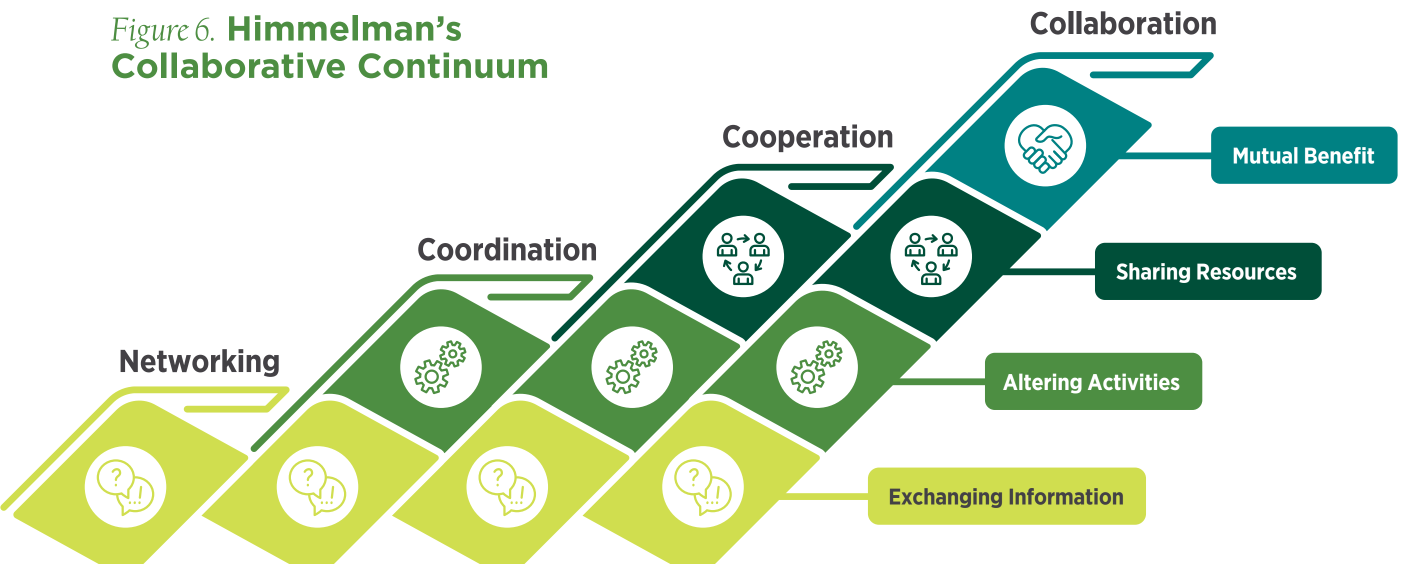
Figure 5. **Percentage of Organizations Engaging in Food Hub Network Activities**



Of the 59 hubs participating in networks, more than two-thirds (68%) reported engaging in four or more different activities through the network. In other words, most of the organizations in networks appear to be participating actively.

Notably, three-quarters of hubs in networks had collaborated to apply for grant funding or capital through a network, an activity which requires a high degree of trust and cooperation. Furthermore, at least one organization in 25 different states (almost all the places where network participation was seen) reported collaborating with other organizations to apply for funding. This suggests that many of the food hub networks are moving beyond exchanging information to sharing of resources and pursuing mutual benefits, indicating higher levels of collaboration.[1]

Figure 6. **Himmelman's Collaborative Continuum**



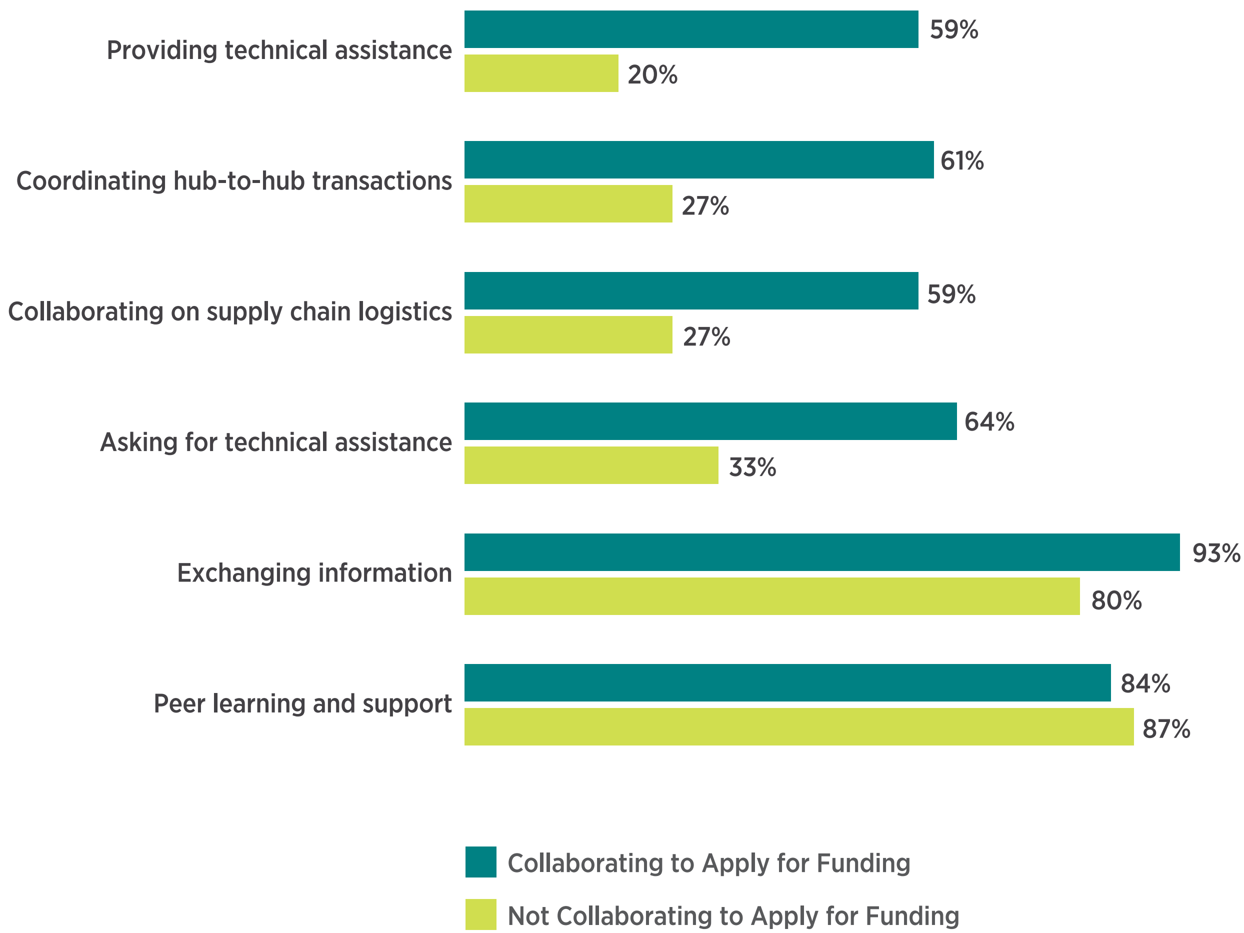
Note: Adapted from Himmelman's Collaborative Continuum.

The hubs that reported collaborating for funding within a network also reported engaging in a larger number of network activities, on average. Hubs collaborating to apply for funding reported an average of 5.3 network activities compared to an average of 2.7 network activities for hubs not collaborating to apply for funding through networks.

Differences between these groups are also apparent when looking at specific network activities. Although the frequency of engaging in peer learning and support was similar between hubs collaborating to apply for funding and those who were not, the hubs collaborating for funding were noticeably more likely to engage in the other five network activities listed, as shown in Figure 7.

1 Himmelman, A. T. (2001). On coalitions and the transformation of power relations: Collaborative betterment and collaborative empowerment. *American Journal of Community Psychology*, 29(2), 277.

Figure 7. Network Activities and Funding Collaboration



The organizations who reported collaborating to apply for funding with other food hubs were also more likely to have applied for five out of the eight listed sources of capital in the last two years (Figure 8). These same organizations also reported a greater reliance on grant funding overall. The greater reliance on grant funding may drive organizations to collaborate with other hubs on funding applications (Figure 9).

Figure 8. **Capital Sources and Funding Collaboration**

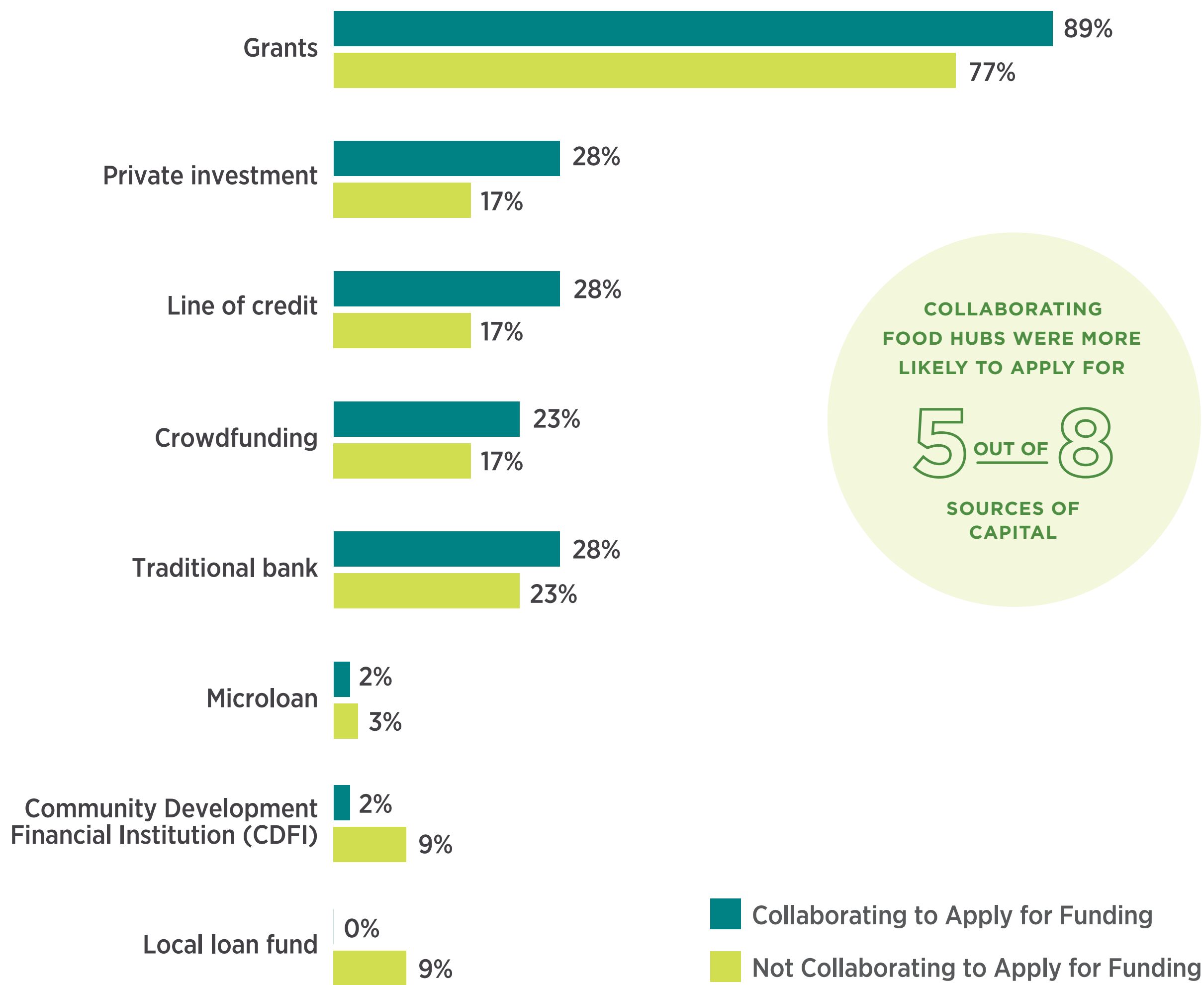
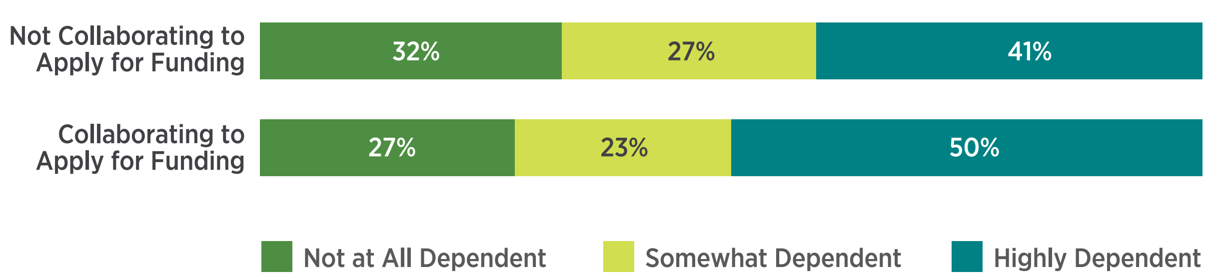


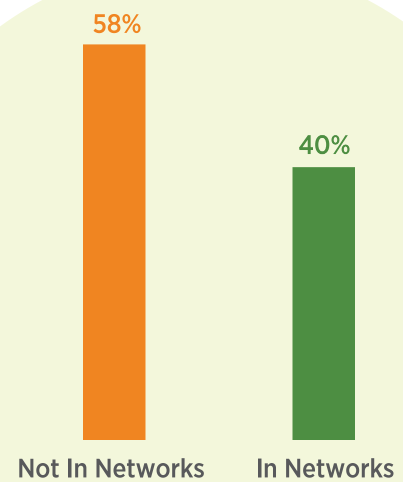
Figure 9. **Grant Dependence and Funding Collaboration**



FOOD HUB CHALLENGES

There were differences in the top challenges experienced between organizations participating in and not participating in food hub networks. The organizations participating in networks were less likely to include access to capital in their top five challenges than those not participating in food hub networks, as shown below. However, the organizations collaborating to apply for funding through networks were more likely to list access to capital as a top challenge. Roughly 45% of organizations in this group reported access to capital was a top challenge compared to 27% of the hubs in networks but not engaged in collaborating for funding. In other words, just like grant reliance overall, challenges with access to capital may be driving organizations to participate in networks and to collaborate with other food hubs to seek funding.

Figure 10. Percent of Organizations Reporting Access to Capital as a Top Challenge by Network Status



Note: *N* = for organizations not in networks.
N = 57 for organizations in networks.

Challenges with access to capital may be driving organizations to participate in networks and to collaborate with other food hubs to seek funding.

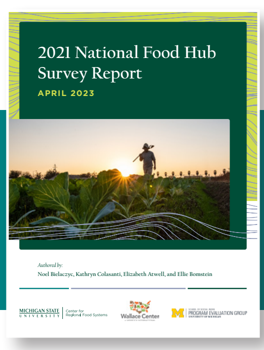
The relationship between challenges accessing capital and collaborating to access funding through networks was also evident with small organizations (less than $100,000 annual gross revenue). Small-scale organizations were more likely to indicate access to capital as a top challenge.[1] Small-scale organizations were also more likely to report collaborating through a network to apply for grant funding or capital,[2] even though the overall average number of network activities was consistent across organization scales.

1 Approximately 77% of the small-scale organizations said access to capital was a top challenge compared to 35% and 25% of medium- and large-scale organizations, respectively.

2 Approximately 92% of the small-scale organizations reported collaborating to access funding compared to 79% and 57% of the medium- and large-scale organizations, respectively.

CONCLUSION

New questions in the 2021 National Food Hub Survey have provided a more complete picture of network engagement within the food hub sector in the United States. The data show that food hub networks are active, plentiful, and engaging diverse organizations, with respect to geography, size, focus area, and business model. These food hub networks appear to be supporting substantial levels of hub-to-hub transactions and collaborative funding applications. Although these activities suggest there are benefits for food hubs that participate in networks, more work is needed to understand the impact of networks on food hub success. Future research could determine if these trends continue and if and how network participation supports organization viability and resilience.



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This data brief was authored by Noel Bielaczyc of MSU Center for Regional Food Systems (CRFS) and Kathryn Colasanti of the University of Michigan Program Evaluation Group (PEG). The data presented here builds upon the findings of the 2021 National Food Hub Survey conducted by CRFS, PEG, and Wallace Center. These briefs received communications guidance from Emma Beauchamp of MSU CRFS, copyediting from Jen Anderson of Clearing Blocks Editing Services, and design by Julia Fiorello of Happy Strategy. This work was generously funded by the W.K. Kellogg Foundation.

To learn more, visit foodsystems.msu.edu/nationalfoodhubsurvey.

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