



# Appendix A: Supplemental Figures



In this appendix are supplemental figures referred to in the report. For the full list of survey questions, please visit the [National Food Hub Survey webpage](#) on the MSU Center for Regional Food Systems website.

**Figure A1. Number of Unpaid Interns, Apprentices, and Volunteers**

<b>Unpaid Interns and Apprentices</b> ( <i>n</i> = 12)	
Total	59
Mean	5
Median	1
Range	1-40
<b>Volunteers</b> ( <i>n</i> = 33)	
Total	757
Mean	23
Median	5
Range	1-450

**Figure A2. Number of Hubs' Producers and Suppliers**

	<b>2013</b> ( <i>n</i> = 79)	<b>2015</b> ( <i>n</i> = 79)	<b>2017</b> ( <i>n</i> = 76)	<b>2019</b> ( <i>n</i> = 61)
Mean	80	83	78	59
Median	36	37	40	40
Range	5-2,000	3-1,500	1-1,800	3-215

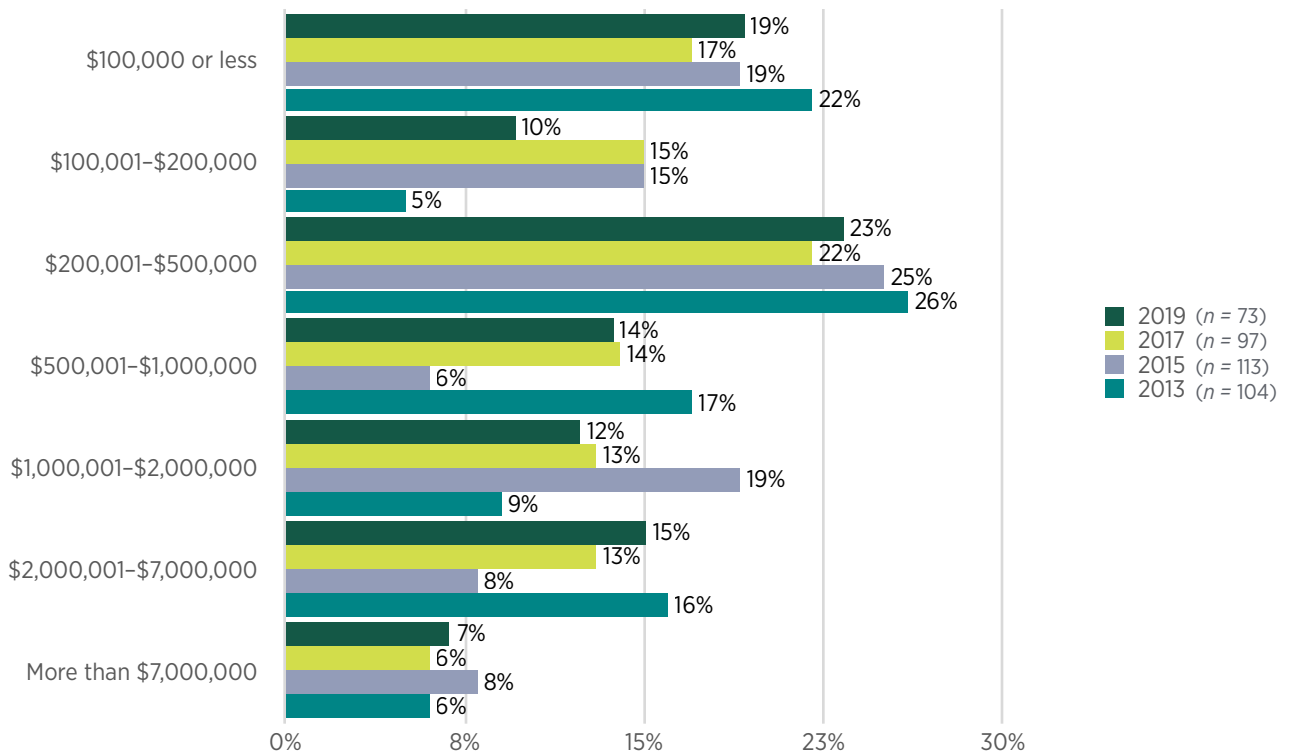
**Figure A3. Average Percentage of Sales Revenue for Meat and Produce**

	<b>Hubs Selling Meat, Poultry, and Fish</b>	<b>Hubs Selling Fresh Produce</b>	<b>Hubs Selling Meat, Poultry, Fish, and Fresh Produce</b>
2019 average percentage of sales revenue	17% ( <i>n</i> = 45)	53% ( <i>n</i> = 64)	66% ( <i>n</i> = 67)
2017 average percentage of sales revenue	20% ( <i>n</i> = 65)	65% ( <i>n</i> = 87)	75% ( <i>n</i> = 93)

**Figure A4. Revenue by Category for 2015, 2017, and 2019**

	2015			2017			2019		
	Percentage of Hubs Reporting	Median Revenue	Minimum/Maximum Revenue	Percentage of Hubs Reporting	Median Revenue	Minimum/Maximum Revenue	Percentage of Hubs Reporting	Median Revenue	Minimum/Maximum Revenue
<b>Overall</b>	<b>100%</b> (n = 113)	<b>\$351,000</b>	<b>\$5,000–\$96,000,000</b>	<b>100%</b> (n = 98)	<b>\$489,000</b> (+39%)	<b>&lt;\$1,000–\$90,000,000</b>	<b>100%</b> (n = 73)	<b>\$495,000</b> (+1%)	<b>(\$3,000)–\$100,000,000</b>
<b>By Years in Operation</b>	(n = 113)			(n = 97)			(n = 73)		
0–2 years	30%	\$172,000	\$5,000–\$12,000,000	21%	\$384,000 (+123%)	\$6,000–\$12,500,000	11%	\$104,000 (-73%)	\$3,000–\$650,000
3–5 years	31%	\$370,000	\$18,000–\$6,000,000	30%	\$260,000 (-30%)	<\$1,000–\$9,200,000	33%	\$321,000 (23%)	\$1,000–\$3,308,000
6–10 years	20%	\$509,000	\$75,000–\$8,000,000	32%	\$604,000 (+19%)	<\$1,000–\$7,500,000	25%	\$513,000 (-15%)	(\$3,000)–\$11,500,000
11+ years	19%	\$1,810,000	\$17,500–\$96,000,000	17%	\$1,600,000 (-12%)	\$38,000–\$90,000,000	32%	\$1,614,000 (.9%)	<\$1,000–\$100,000,000
<b>By Legal Structure</b>	(n = 108)			(n = 94)			(n = 68)		
For-profit	39%	\$1,020,000	\$26,000–\$70,000,000	39%	\$890,000 (-13%)	<\$1,000–\$90,000,000	49%	\$700,000 (-21%)	<\$1,000–\$100,000,000
Nonprofit	35%	\$232,000	\$5,000–\$13,916,000	43%	\$288,000 (+24%)	<\$1,000–\$14,633,000	32%	\$362,000 (+26%)	(\$3,000)–\$9,500,000
Cooperative	25%	\$266,000	\$18,000–\$96,000,000	18%	\$389,000 (+46%)	\$6,000–\$3,519,000	19%	\$611,000 (+57%)	\$65,000–\$3,581,000
<b>By Business Model</b>	(n = 113)			(n = 97)			(n = 69)		
Direct to consumer	16%	\$197,000	\$5,000–\$12,000,000	16%	\$670,000 (+240%)	<\$1,000–\$7,500,000	26%	\$165,000 (-75%)	\$3,000–\$6,280,000
Hybrid	53%	\$270,000	\$7,000–\$16,527,000	46%	\$380,000 (+41%)	<\$1,000–\$14,000,000	28%	\$421,000 (+11%)	(\$3,000)–\$3,305,000
Wholesale	31%	\$1,077,000	\$50,000–\$96,000,000	38%	\$728,000 (-32%)	\$6,000–\$90,000,000	46%	\$1,406,000 (+93%)	<\$1,000–\$100,000,000

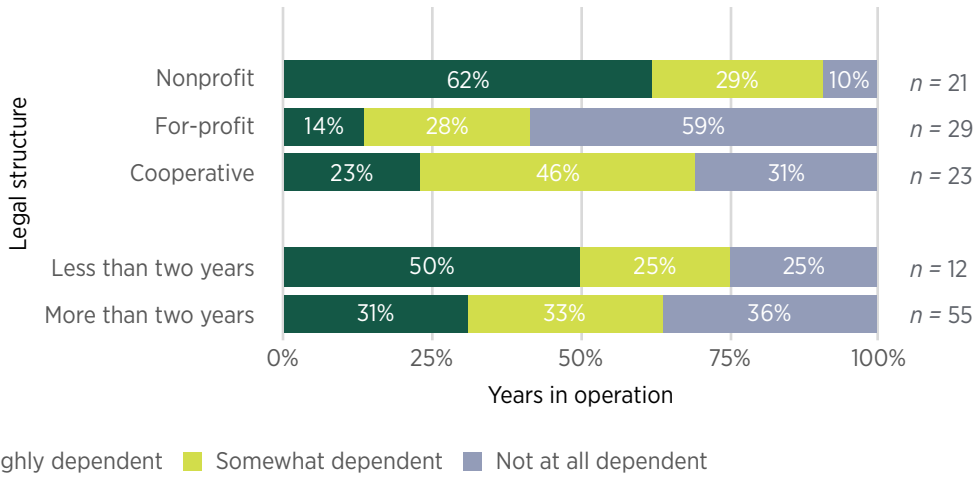
**Figure A5. Food Hub Gross Revenue by Category by Year**



**Figure A6. Percentage of Hubs With Grant Type by Legal Structure**

	Foundation	Federal	State
Nonprofit (n = 15)	73%	80%	47%
Cooperative (n = 5)	60%	60%	20%
For-profit (n = 9)	44%	56%	33%

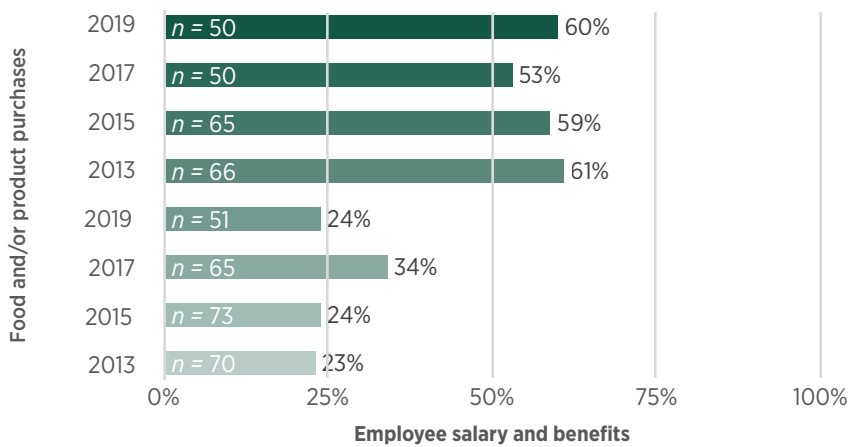
**Figure A7. Food Hub Reliance on Grant Funding by Legal Structure and Years in Operation**



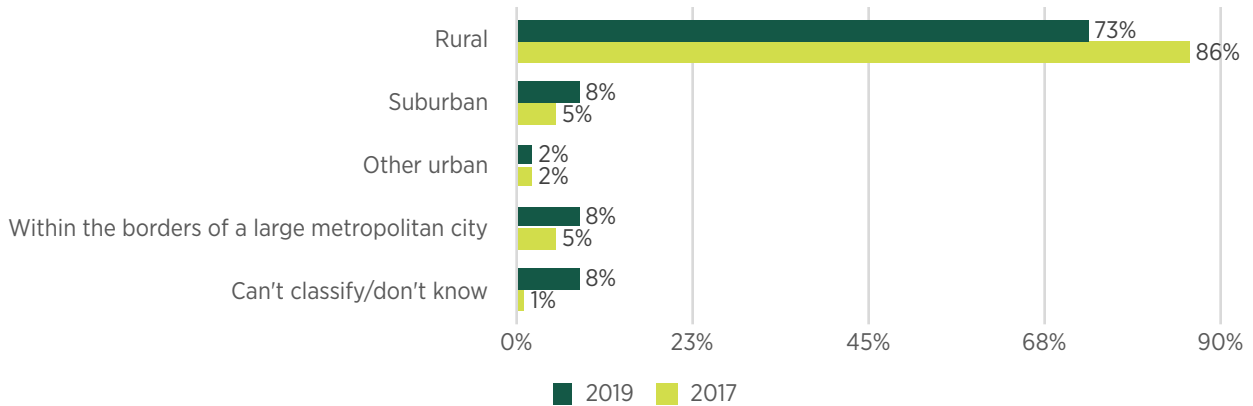
**Figure A8. Food Hub Expenses by Survey Year**

	2013 (n = 79)	2015 (n = 87)	2017 (n = 78)	2019 (n = 62)
<b>Mean expenses</b>	\$3,345,000	\$2,173,000	\$1,234,000	\$1,507,791
<b>Median expenses</b>	\$311,000	\$238,000	\$378,000	\$522,241

**Figure A9. Major Food Hub Expenses as a Percentage of Revenue**



**Figure A10. Farms and Ranches Supplying Hubs by Farm or Ranch Location**

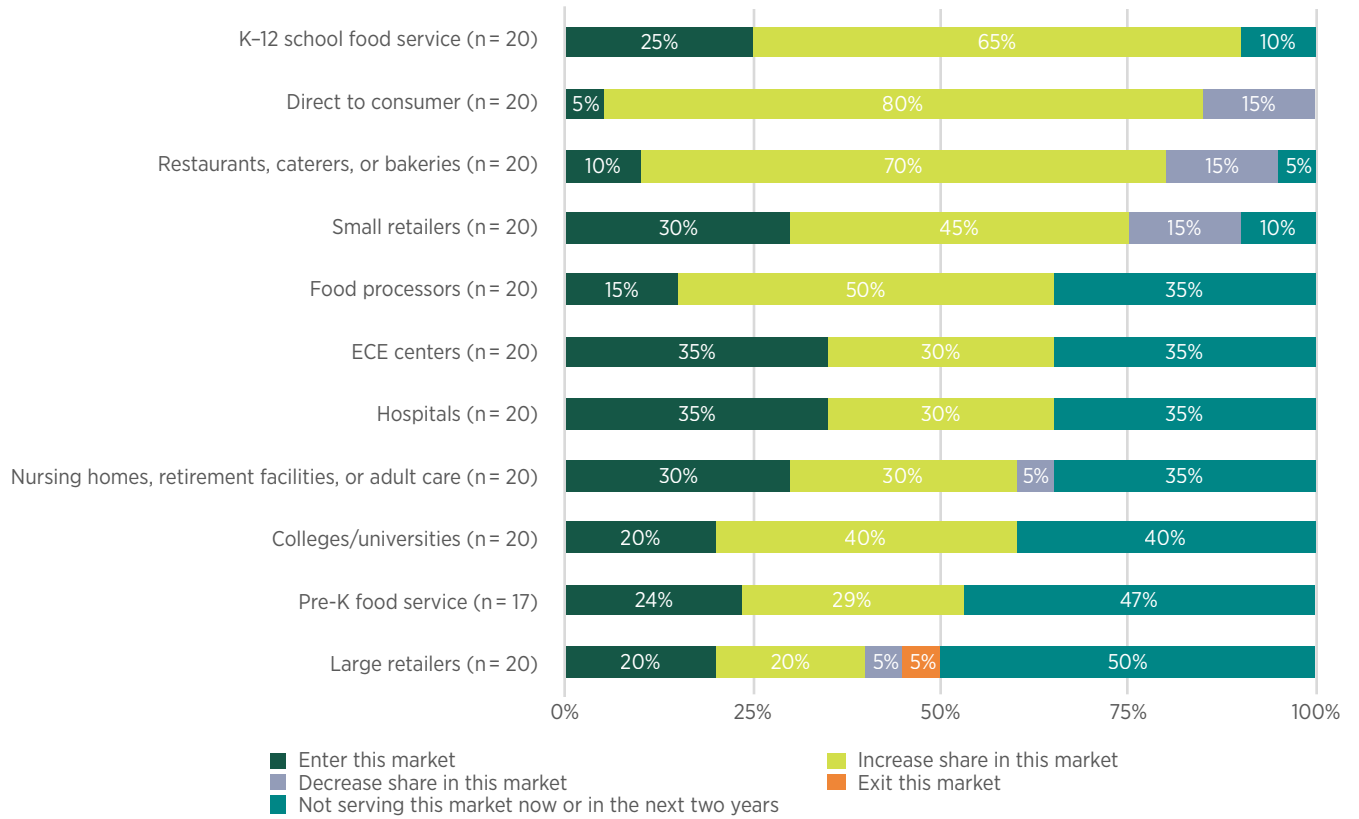


**Figure A11. Prioritized Metrics**



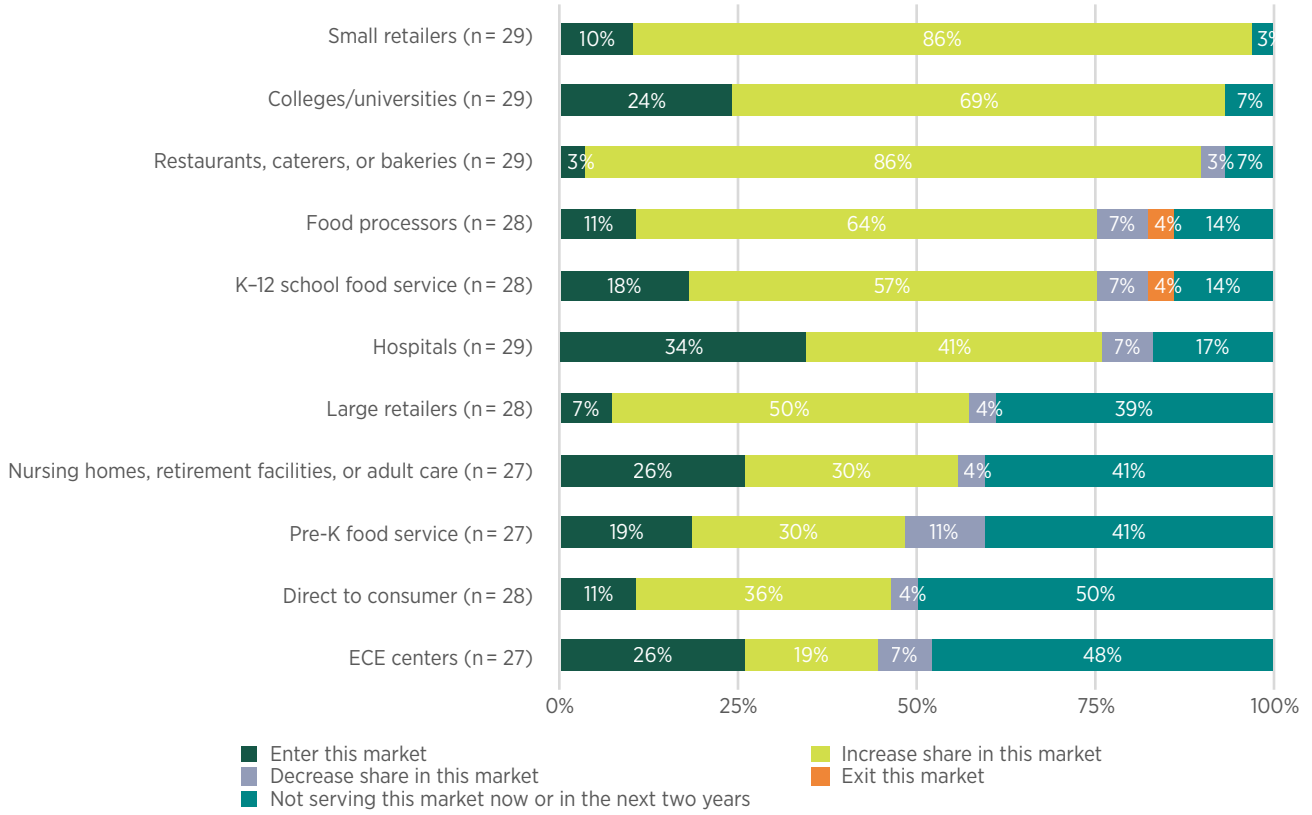
Note: N = 38; the percentages in the chart may not add up to the percentages in the narrative due to rounding.

**Figure A12. Two-Year Market Intentions for Hybrid Hubs**



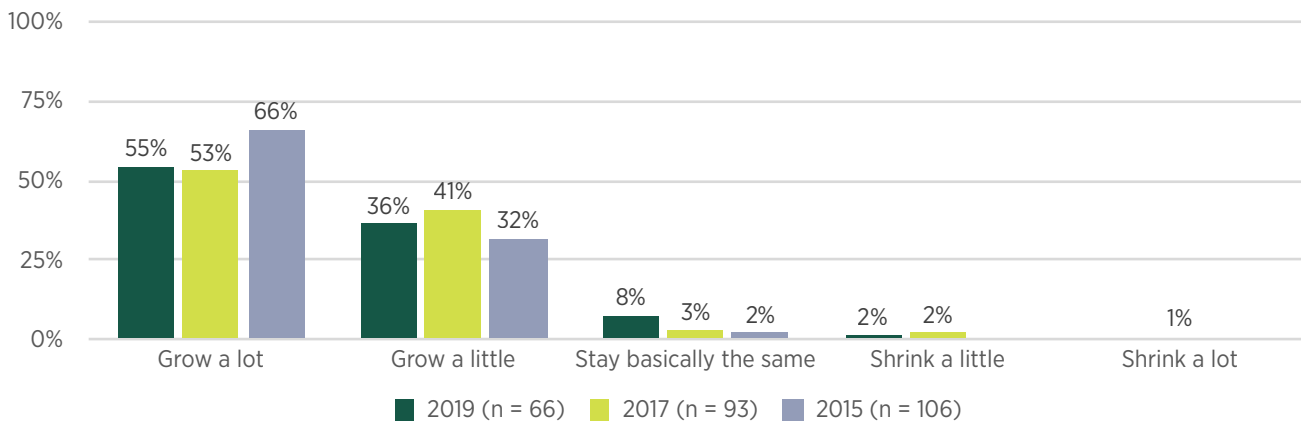
Note: Each category may equal more than 100% due to rounding within categories.

**Figure A13. Two-Year Market Intentions for Wholesale Hubs**



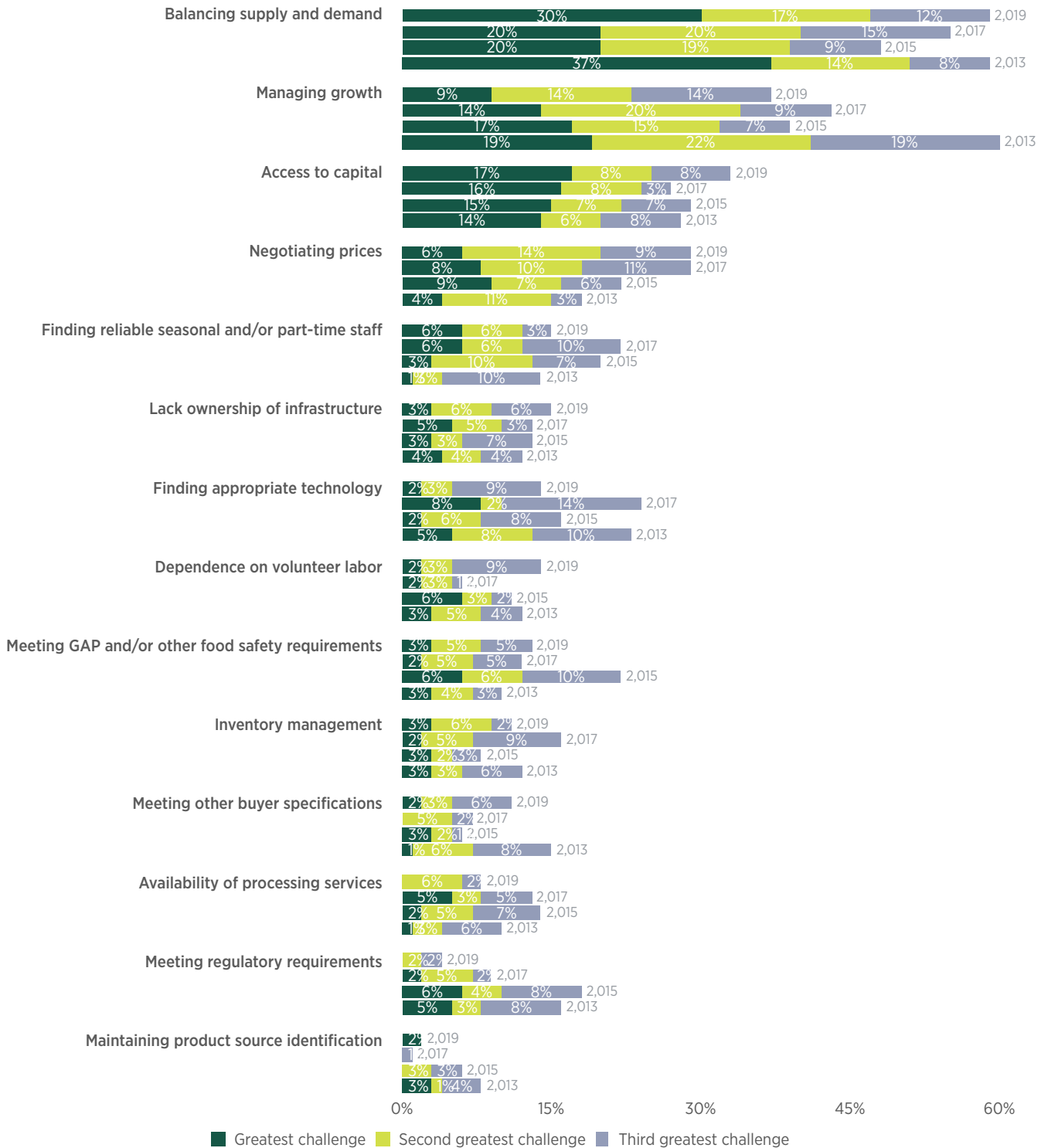
Note: Each category may equal more than 100% due to rounding within categories.

**Figure A14. Predicted Future Change in Demand for Products and Services Over Two-Year Period**



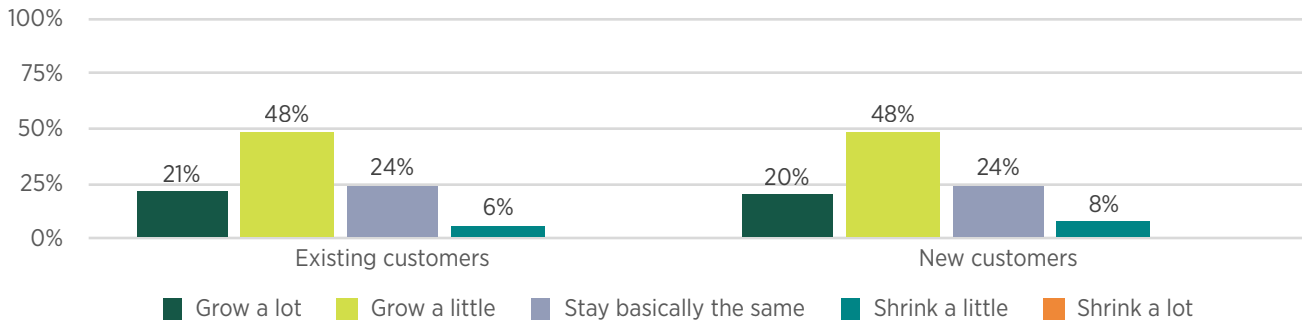


**Figure A15. Top Challenges for Food Hubs by Year**



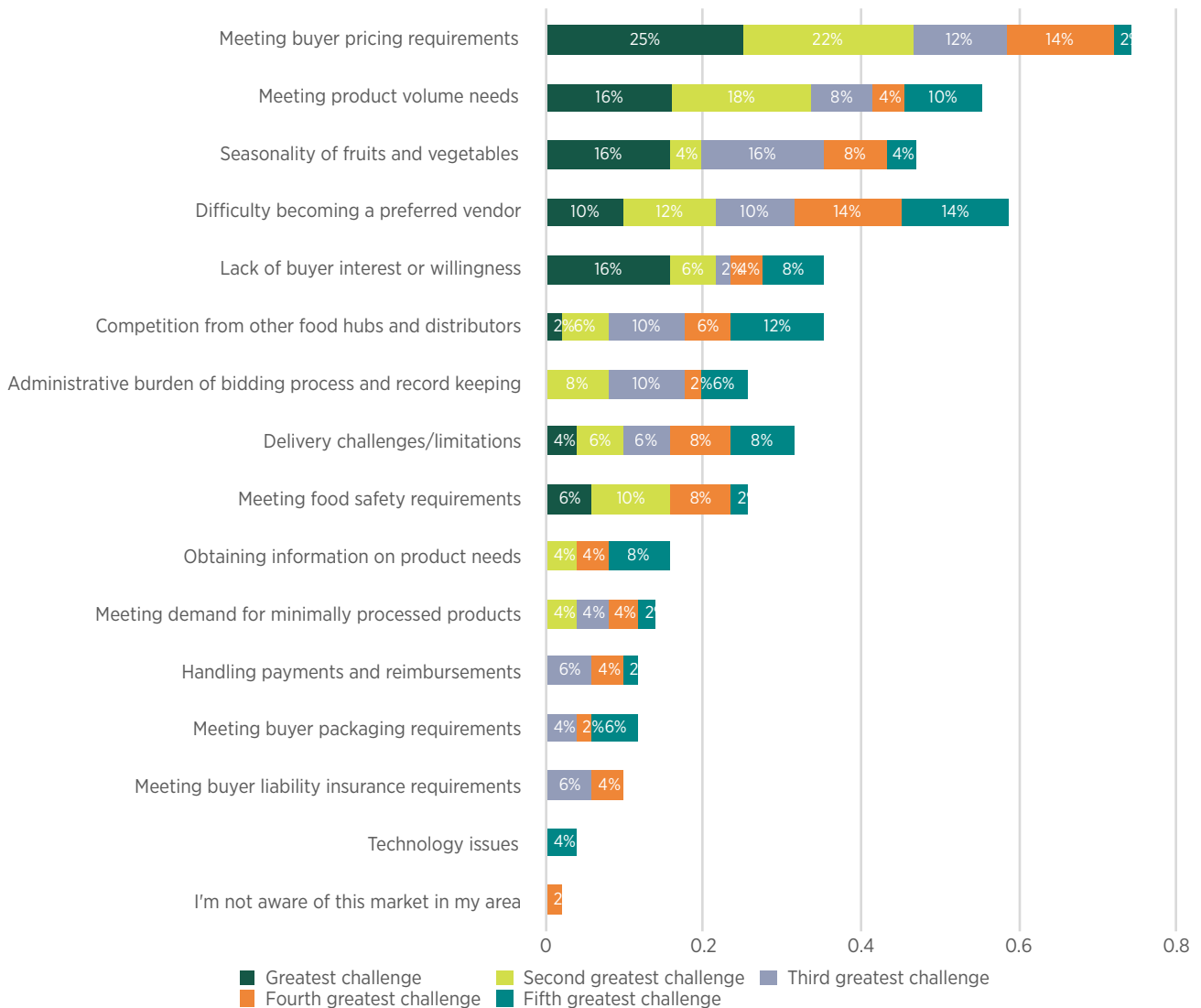
Note: n varied by year.

**Figure A16. Perceived Change in Competition for New and Existing Customers Through 2021**

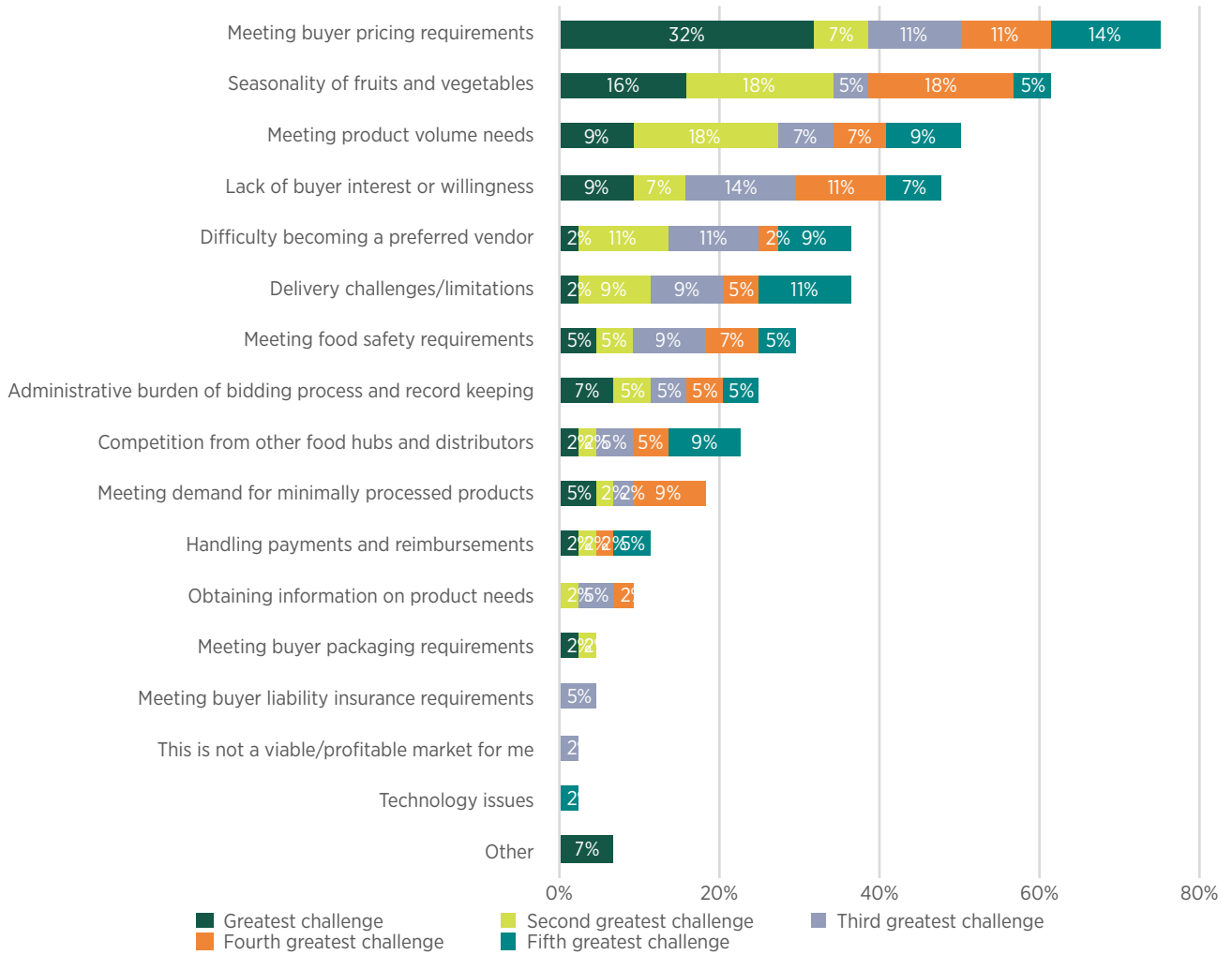


Note: n = 66.

**Figure A17. All Barriers to Expansion Into the College/University and Hospital Market**

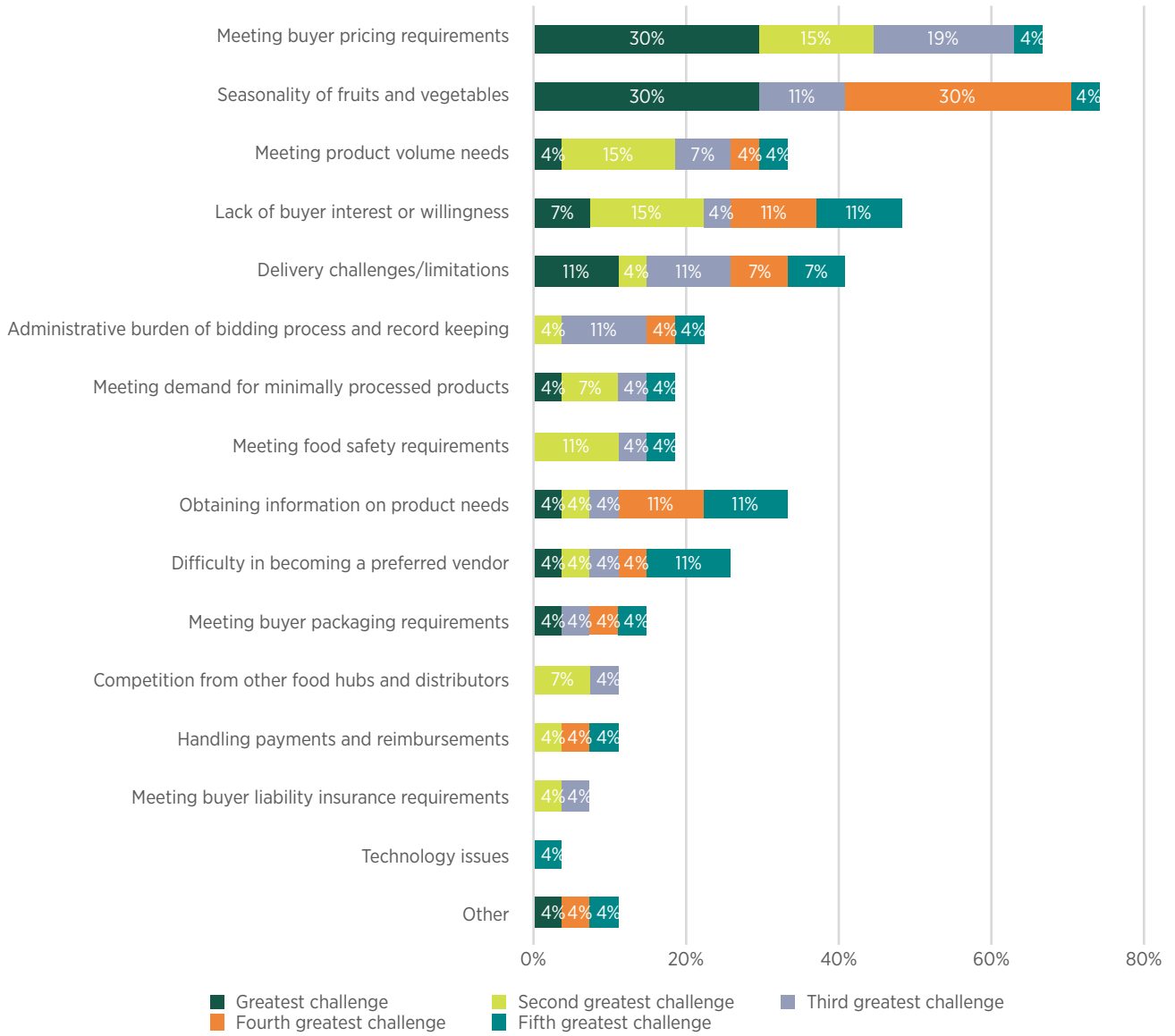


**Figure A18. All Barriers to Expansion Into the K-12 School Food Service Market**



Note: n = 44.

**Figure A19. All Barriers to Expansion Into the ECE and Pre-K Food Service Market**



Note: n = 27.



# Appendix B

## *Tools, Software, and/or Platforms Used to Track and Assess Metrics Related to Social and Environmental Goals*

- » Aggregator
- » Apricot—data software
- » Edible Software, grower satisfaction survey conducted by evaluation consultant; Facebook/Google/Web analytics/Mailchimp analytics, customer satisfaction survey conducted via staff interviews or SurveyMonkey; risk assessment of eco-production practices audited and analyzed by IPM Institute of North America using their Pesticide Risk Tool
- » eTapestry
- » Excel alone (x6)
- » Excel, Google Docs, Market Mobile software
- » General ledger, Xero.com, Electronic Benefits Transfer matching program, Excel, organic certification
- » Google Docs
- » Harvest to Market, Local Food Marketplace, Xero, Google suite
- » JustFoodERP, Excel
- » Local Food Marketplace, QuickBooks, Excel
- » Microsoft Office, Trello, Mailchimp, Local Line (food hub software)
- » None; we do not have the resources to do this
- » QuickBooks alone (x2)
- » QuickBooks and Excel alone (x9)
- » QuickBooks, Excel, customer relationship software
- » QuickBooks, Excel, Google Sheets, Local Orbit
- » QuickBooks, Excel, Local Farm Marketplace
- » QuickBooks, Excel, Local Food Marketplace, Google Documents
- » QuickBooks, Google Drive, Google Documents
- » QuickBooks, Google Drive, Local Food Marketplace, Microsoft suite
- » QuickBooks, Google Sheets
- » QuickBooks, JotForm, Google Sheets
- » QuickBooks, Local Food Marketplace, HubSpot, Google Drive, Google Sheets, Google Docs, Pages
- » QuickBooks, proprietary software
- » Salesforce, Excel, Local Food Marketplace
- » Salesforce, Food Connex, QuickBooks