

Q1. First, we would like to learn a little about your organization. What is the primary industry your business serves? Please select the industry in which you conduct most of your business.

	Region			
	Total	Downstate	North Central	Southwest
Aerospace & Aviation	10%	17%	8%	5%
Agricultural Equipment	0%	0%	0%	0%
Biotech and Biopharma	2%	4%	3%	0%
Construction Equipment	9%	6%	13%	7%
Consumer Products	19%	24%	19%	14%
Electronics	8%	6%	8%	9%
Food & Beverage	11%	16%	8%	10%
Industrial Equipment & Machinery	17%	15%	16%	22%
Medical Equipment & Devices	7%	8%	4%	10%
Oil, Gas, Mining, Chemical	3%	1%	2%	6%
Power & Energy	4%	2%	6%	5%
Transportation	5%	1%	4%	8%
Other	4%	1%	8%	4%

Q3. What "in-house" manufacturing capabilities does your organization possess within your NYS locations?

	Region			
	Total	Downstate	North Central	Southwest
Assembly	65%	63%	62%	72%
Casting	6%	6%	8%	4%
Finishing (Label, paint, etc.)	42%	35%	42%	47%
Molding	18%	13%	18%	22%
Forming	24%	21%	24%	27%
Cutting	32%	23%	33%	40%
Machining	45%	38%	46%	51%
Processing plastics and polymers	14%	14%	15%	14%
Joining	27%	22%	29%	31%
Packaging	42%	44%	39%	43%
Additive Manufacturing	18%	16%	21%	16%
Abrasive machining	21%	22%	18%	24%
Semiconductor fabrication	1%	0%	2%	1%
Testing	32%	34%	29%	33%
Food manufacturing/processing	6%	7%	5%	7%
Chemical Processing	3%	3%	0%	5%
Fabric Processing	2%	1%	2%	3%
Printing Processes	2%	1%	3%	3%
Other	9%	17%	8%	4%

Q4. What primary materials does your company process?

	Region			
	Total	Downstate	North Central	Southwest
Metals	49%	48%	45%	56%
Plastics/Polymers	35%	40%	27%	39%
Ceramics	5%	4%	7%	5%
Textiles	10%	8%	12%	11%
Composites	21%	17%	29%	16%
Chemicals	11%	10%	13%	11%
Food	11%	14%	10%	10%
Biological	1%	1%	1%	0%
Other	11%	8%	14%	7%

Q5. Thinking about your position in the supply chain that you participate in, please indicate whether or not you do each of the following:

	Region			
	Total	Downstate	North Central	Southwest
Import foreign components or finished goods directly	45%	37%	47%	49%
Purchase imported foreign components or finished goods through a domestic source	54%	47%	55%	57%
Purchase domestic components or finished goods	85%	87%	82%	86%
Distribute/sell components or finished goods within the U.S.	82%	80%	82%	83%
Export components or finished goods outside of the U.S.	56%	53%	55%	58%

Q6A. Of the materials you PURCHASE, both raw materials and components, what percentage originates from OUTSIDE the U.S.?				
	Region			
	Total	Downstate	North Central	Southwest
Mean:	28%	31%	26%	28%
Q6B. Of the materials you PURCHASE, both raw materials and components, what percentage originates from WITHIN the U.S.?				
	Region			
	Total	Downstate	North Central	Southwest
Mean:	64%	61%	62%	69%
Q7A. Of the materials you DISTRIBUTE, both raw materials and components, what percentage originates from OUTSIDE the U.S.?				
	Region			
	Total	Downstate	North Central	Southwest
Mean:	20%	22%	19%	19%
Q7B. Of the materials you DISTRIBUTE, both raw materials and components, what percentage originates from WITHIN the U.S.?				
	Region			
	Total	Downstate	North Central	Southwest
Mean:	66%	64%	69%	66%
Q8. How many employees do you have at all New York State locations?				
	Region			
	Total	Downstate	North Central	Southwest
1-20	25%	38%	22%	15%
21-50	30%	26%	29%	36%
51-100	22%	19%	25%	21%
101+	23%	18%	24%	28%
Q9. Which region below houses your main or largest manufacturing operation?				
	Region			
	Total	Downstate	North Central	Southwest
North Central	19%	0%	54%	0%
Central NY	7%	0%	18%	0%
Southwest	12%	0%	0%	35%
Long Island	13%	44%	0%	0%
Mid-Hudson Valley	7%	22%	0%	0%
Mohawk Valley	5%	0%	13%	0%
NYC	11%	35%	0%	0%
North Country	5%	0%	15%	0%
Southern Tier	7%	0%	0%	21%
Western NY	14%	0%	0%	44%
Other	1%	0%	0%	0%
Q10. As you think about the current business or economic conditions in New York State as compared to before the pandemic, would you say they are considerably better, a little better, about the same, a little worse, or considerably worse?				
	Region			
	Total	Downstate	North Central	Southwest
Considerably better	6%	7%	8%	5%
A little better	9%	8%	9%	9%
About the same	14%	9%	13%	20%
A little worse	36%	36%	39%	32%
Considerably worse	35%	41%	31%	35%
Q11. Looking forward from today through the next 12 months, how would you describe your expectations for the economy in New York State?				
	Region			
	Total	Downstate	North Central	Southwest
Considerably better	7%	12%	7%	4%
A little better	37%	36%	30%	44%
About the same	29%	28%	30%	29%
A little worse	18%	18%	22%	15%
Considerably worse	9%	7%	11%	8%

Q12. Now thinking specifically about your industry, how would you describe the current business or economic conditions in New York State as compared with before the pandemic?				
	Region			
	Total	Downstate	North Central	Southwest
Considerably better	8%	8%	9%	6%
A little better	14%	12%	13%	15%
About the same	22%	19%	22%	25%
A little worse	29%	31%	34%	24%
Considerably worse	27%	31%	23%	30%

Q13. And looking forward from today through the next 12 months, how would you describe your expectations for your industry here in New York?				
	Region			
	Total	Downstate	North Central	Southwest
Considerably better	9%	10%	8%	9%
A little better	36%	41%	33%	35%
About the same	27%	23%	29%	31%
A little worse	18%	18%	21%	16%
Considerably worse	9%	9%	10%	9%

Q14. Do you intend to invest in the next 12 months in any fixed assets for your company designed to meet growing demand, reduce costs or enhance productivity?				
	Region			
	Total	Downstate	North Central	Southwest
Yes	66%	59%	67%	69%
No	15%	20%	14%	13%
Not sure	19%	21%	18%	18%

Q15. Next, we'd like you to think about your supply chain, both acquisitions and distributions, since the start of the pandemic. Have you experienced any disruptions in your supply chain since the start of the pandemic?				
	Region			
	Total	Downstate	North Central	Southwest
Yes	95%	93%	97%	95%
No	5%	7%	3%	5%

Q16. [If Yes to Q15] Were those disruptions in acquisitions, distribution or both?				
	Region			
	Total	Downstate	North Central	Southwest
Acquisitions	35%	37%	34%	35%
Distribution	9%	11%	9%	9%
Both	55%	52%	57%	57%

Q17. Were the disruptions to ACQUISITIONS outside of the U.S., within the U.S., or both?				
	Region			
	Total	Downstate	North Central	Southwest
Outside of the U.S.	5%	7%	4%	4%
Within the U.S.	24%	25%	24%	25%
Both	71%	68%	73%	71%

Q17A. Were the disruptions to DISTRIBUTION outside of the U.S., within the U.S., or both?				
	Region			
	Total	Downstate	North Central	Southwest
Outside of the U.S.	3%	2%	4%	1%
Within the U.S.	40%	42%	36%	43%
Both	58%	56%	61%	56%

Q18. How significant an impact did the disruption(s) to your ACQUISITIONS have on your business?				
	Region			
	Total	Downstate	North Central	Southwest
Very significant	32%	38%	34%	24%
Somewhat significant	51%	45%	52%	56%
Not too significant	17%	17%	14%	20%
Not at all significant	0%	0%	0%	0%

Q19. How significant an impact did the disruption(s) to your DISTRIBUTIONS have on your business?				
	Region			
	Total	Downstate	North Central	Southwest
Very significant	24%	31%	28%	13%
Somewhat significant	52%	51%	47%	59%
Not too significant	24%	19%	25%	28%
Not at all significant	0%	0%	0%	0%

Q20. Which, if any, of the following are challenges you have faced with your supply chain since the start of the pandemic? [Select all that apply.]				
	Region			
	Total	Downstate	North Central	Southwest
Tariffs	29%	31%	24%	35%
Rising cost of materials	93%	93%	94%	93%
Rising supply chain management costs	53%	42%	57%	58%
Increased demand for your product(s)	41%	33%	47%	42%
Decreased demand for your product(s)	23%	25%	24%	20%
Changing customer expectations for fulfillment	41%	41%	45%	37%
Transportation delays	86%	84%	84%	88%
Limited availability of materials	86%	84%	88%	86%
Bidding wars for materials	21%	18%	27%	17%
Customers delayed or unable to pay	24%	26%	28%	19%
Reduced foreign imports	32%	36%	34%	27%
Reduced foreign exports	9%	8%	8%	10%
Reduced domestic purchases	26%	24%	30%	23%
Reduced domestic distributions	19%	21%	18%	17%
Lack of labor	6%	4%	2%	2%
Other	2%	1%	0%	0%
None of the above	0%	0%	6%	13%

Q21. Of those, which do believe has been the SINGLE greatest challenge?				
	Region			
	Total	Downstate	North Central	Southwest
Tariffs	2%	4%	1%	3%
Rising cost of materials	35%	34%	30%	42%
Rising supply chain management costs	3%	3%	3%	3%
Increased demand for your product(s)	3%	1%	4%	5%
Decreased demand for your product(s)	9%	10%	9%	7%
Changing customer expectations for fulfillment	2%	4%	3%	0%
Transportation delays	7%	9%	9%	3%
Limited availability of materials	32%	30%	36%	28%
Bidding wars for materials	1%	0%	1%	1%
Customers delayed or unable to pay	2%	1%	2%	2%
Reduced foreign imports	1%	1%	1%	0%
Reduced foreign exports	0%	1%	0%	0%
Reduced domestic purchases	0%	0%	0%	0%
Reduced domestic distributions	0%	0%	0%	1%
Lack of labor	3%	0%	0%	0%
Other	0%	0%	0%	0%
None of the above	0%	1%	2%	6%

Q22. [If "Rising cost of materials" selected in Q21] For which of the following materials did you see an increase in costs?				
	Region			
	Total	Downstate	North Central	Southwest
Polymers	42%	40%	40%	46%
Metals	67%	61%	70%	71%
Ceramics	8%	7%	8%	9%
Composites	16%	14%	17%	16%
Wood/Paper/Pulp	40%	29%	46%	43%
Food Product	11%	14%	9%	10%
Chemicals	34%	31%	39%	31%
Textiles	11%	6%	8%	18%

Q23. [If Yes to Q15] Have you experienced any of the following due to disruptions in your supply chain since the start of the pandemic:				
	Region			
	Total	Downstate	North Central	Southwest
Turned business away	32%	26%	41%	28%
Reduced operations	40%	33%	41%	44%
Stopped operations for any period of time	21%	18%	24%	18%
Changed your product(s)	17%	22%	19%	11%
Increased prices	71%	67%	70%	75%
Purchased materials through alternative sources	74%	64%	80%	77%

Q24. [If "Purchased materials through alternative sources" selected in Q23] Which, if any, are true of the materials you purchased through alternative sources?				
	Region			
	Total	Downstate	North Central	Southwest
Paid more	95%	93%	97%	95%
Paid less	6%	8%	4%	6%
Lower quality	29%	32%	38%	19%
Higher Quality	4%	8%	3%	3%
Domestic rather than foreign	17%	22%	19%	11%
Foreign rather than domestic	23%	27%	27%	15%

Q25KEY. Supply chain disruptions during the pandemic have led to increased discussions on reshoring, or returning the production and manufacturing of goods back to the U.S. To what extent do you agree or disagree with the following statements about reshoring?

Q25A. The benefits of onshore production outweigh the higher labor costs.				
	Region			
	Total	Downstate	North Central	Southwest
Completely agree	21%	20%	24%	21%
Somewhat agree	58%	58%	59%	55%
Somewhat disagree	15%	19%	11%	15%
Completely disagree	6%	3%	7%	8%

Q25B. Increasing costs, like labor costs, shipping costs, and tariffs, are making it more prohibitive to continue offshore operations.				
	Region			
	Total	Downstate	North Central	Southwest
Completely agree	17%	24%	13%	15%
Somewhat agree	55%	49%	55%	60%
Somewhat disagree	26%	24%	29%	24%
Completely disagree	3%	4%	3%	1%

Q25C. The cost of domestic materials is too high to consider reshoring.				
	Region			
	Total	Downstate	North Central	Southwest
Completely agree	8%	10%	3%	11%
Somewhat agree	38%	42%	37%	36%
Somewhat disagree	41%	35%	46%	42%
Completely disagree	13%	14%	13%	11%

Q25D. The cost of transitioning to onshore production makes it impractical to undertake.				
	Region			
	Total	Downstate	North Central	Southwest
Completely agree	5%	4%	6%	5%
Somewhat agree	30%	33%	26%	30%
Somewhat disagree	43%	46%	40%	45%
Completely disagree	22%	18%	28%	20%

Q25E. Reshoring will enhance supply chain predictability.				
	Region			
	Total	Downstate	North Central	Southwest
Completely agree	34%	32%	38%	32%
Somewhat agree	50%	52%	47%	50%
Somewhat disagree	15%	15%	12%	18%
Completely disagree	2%	1%	3%	0%

Q25F. Companies cannot remain competitive if they are reshoring.				
		Region		
	Total	Downstate	North Central	Southwest
Completely agree	5%	6%	6%	4%
Somewhat agree	30%	33%	27%	32%
Somewhat disagree	51%	46%	53%	54%
Completely disagree	14%	16%	14%	11%
Q26. Which of the following is true for your company?				
		Region		
	Total	Downstate	North Central	Southwest
We have already begun reshoring at least some	24%	24%	25%	22%
We will begin reshoring at least some	15%	32%	5%	15%
We plan to begin reshoring someday	5%	3%	9%	2%
We have no plans to begin reshoring	55%	41%	61%	61%
Q27. Have you had to turn business away in the past year because you were unable to hire the necessary skilled staff to keep up?				
		Region		
	Total	Downstate	North Central	Southwest
Yes	49%	42%	53%	54%
No	51%	58%	47%	46%
Q28. In which, if any, of the following functional areas are you struggling to fill positions? [Select all that apply.]				
		Region		
	Total	Downstate	North Central	Southwest
Foundational	11%	10%	13%	9%
Machining	35%	35%	38%	34%
Machine Maintenance	31%	24%	38%	30%
Welding	17%	15%	19%	16%
Stamping/Forming/Fabricating	12%	10%	11%	15%
Composites Processing	5%	5%	7%	5%
Assembly/Final Stage Processes	41%	29%	47%	46%
Design and Engineering	26%	21%	24%	33%
Leadership	23%	24%	22%	23%
Smart Manufacturing	9%	10%	8%	8%
Packaging/Warehousing	34%	30%	39%	34%
Skilled workers	5%	6%	13%	5%
Quality Control	5%	15%	8%	8%
Production Workers	7%	3%	4%	8%
Administrative	2%	5%	3%	8%
Other	8%	3%	5%	13%
None of the above	11%	0%	5%	2%
Q29. Of those, which ONE presents the greatest need for your organization?				
		Region		
	Total	Downstate	North Central	Southwest
Foundational	1%	0%	0%	3%
Machining	17%	19%	16%	17%
Machine Maintenance	10%	11%	14%	6%
Welding	11%	11%	8%	14%
Stamping/Forming/Fabricating	5%	2%	4%	8%
Composites Processing	2%	2%	3%	0%
Assembly/Final Stage Processes	24%	15%	30%	24%
Design and Engineering	9%	13%	7%	10%
Leadership	2%	4%	1%	0%
Smart Manufacturing	3%	9%	1%	0%
Packaging/Warehousing	11%	15%	14%	6%
Skilled workers	2%	0%	0%	0%
Quality Control	0%	0%	0%	0%
Production Workers	3%	0%	1%	3%
Administrative	0%	0%	0%	0%
Other	0%	0%	0%	8%
None of the above	0%	0%	0%	0%

Q30. Which, if any, of the following skill areas do you find candidates lacking? [Select all that apply.]				
		Region		
	Total	Downstate	North Central	Southwest
Elementary blueprint reading	21%	14%	23%	27%
Principles of simple Computer Numerical Controls devices	18%	15%	19%	20%
Simple manufacturing obstacles	39%	27%	48%	41%
High performance and lean manufacturing concepts	30%	31%	34%	26%
Safety	19%	16%	24%	16%
Quality Practices & Measurement	34%	36%	37%	30%
Manufacturing Processes & Production	54%	45%	59%	59%
Maintenance Awareness	27%	24%	29%	27%
Leadership Skills	30%	28%	34%	30%
Time Management/Prioritization	43%	41%	50%	38%
Problem Solving	47%	51%	43%	49%
Work Ethic	7%	8%	8%	5%
Other	7%	16%	10%	13%
None of the above	13%	4%	10%	5%

Q31. Of those, which ONE presents the greatest need for your organization?				
		Region		
	Total	Downstate	North Central	Southwest
Elementary blueprint reading	1%	1%	1%	1%
Principles of simple Computer Numerical Controls devices	8%	6%	7%	11%
Simple manufacturing obstacles	8%	9%	11%	3%
High performance and lean manufacturing concepts	6%	12%	2%	6%
Safety	1%	0%	4%	0%
Quality Practices & Measurement	5%	9%	6%	1%
Manufacturing Processes & Production	39%	28%	38%	49%
Maintenance Awareness	4%	3%	6%	1%
Leadership Skills	4%	4%	2%	4%
Time Management/Prioritization	9%	9%	9%	8%
Problem Solving	14%	15%	12%	15%
Work Ethic	0%	3%	0%	0%
Other	1%	0%	0%	0%
None of the above	0%	0%	0%	0%

Q32. Did your business receive support in the form of PPE's, grants, etc. from the state or federal government during the pandemic?				
		Region		
	Total	Downstate	North Central	Southwest
Yes	78%	82%	70%	84%
No	22%	18%	30%	16%

Q33KEY: Next, we'd like to learn more about automation within your organization. Please rate the level of automation within your organization in each of the following areas.

Q33A. Production Floor (sensors, communication technologies, robotics, etc.)				
		Region		
	Total	Downstate	North Central	Southwest
None	21%	30%	15%	19%
Limited	52%	47%	50%	58%
Moderate	23%	20%	28%	20%
High	4%	1%	8%	3%
Don't know/Refused	1%	3%	0%	0%

Q33B. Control (programmable logic controller, distributed control system)				
		Region		
	Total	Downstate	North Central	Southwest
None	25%	35%	18%	25%
Limited	36%	34%	38%	37%
Moderate	27%	21%	29%	33%
High	9%	8%	14%	5%
Don't know/Refused	2%	3%	2%	0%

Q33C. Supervisory Control and Data Acquisition (SCADA) Systems				
		Region		
	Total	Downstate	North Central	Southwest
None	45%	50%	39%	47%
Limited	40%	37%	40%	43%
Moderate	11%	6%	17%	8%
High	3%	4%	3%	2%
Don't know/Refused	2%	3%	2%	0%
Q33D. Planning (management execution system (MES), manufacturing operations management (MOM))				
		Region		
	Total	Downstate	North Central	Southwest
None	36%	45%	28%	35%
Limited	36%	28%	44%	35%
Moderate	20%	16%	20%	25%
High	7%	9%	7%	5%
Don't know/Refused	2%	3%	2%	0%
Q33E. Management Decision Making (enterprise resource planning (ERP))				
		Region		
	Total	Downstate	North Central	Southwest
None	23%	28%	22%	19%
Limited	31%	37%	29%	27%
Moderate	31%	17%	34%	39%
High	14%	16%	13%	15%
Don't know/Refused	2%	3%	2%	0%
Q34. Do you intend to invest in reshoring or strengthening your supply chain between today through the end of 2022?				
		Region		
	Total	Downstate	North Central	Southwest
Yes	45%	48%	45%	44%
No	22%	22%	24%	22%
Not sure	31%	28%	30%	35%
Don't know/Refused	2%	3%	2%	0%
Q35. Are you interested in learning more about reshoring and supply chain opportunities?				
		Region		
	Total	Downstate	North Central	Southwest
Yes	40%	42%	45%	35%
No	49%	53%	42%	53%
Don't know/Refused	11%	5%	13%	13%