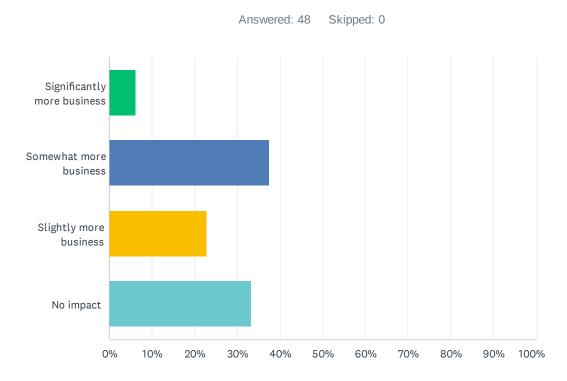
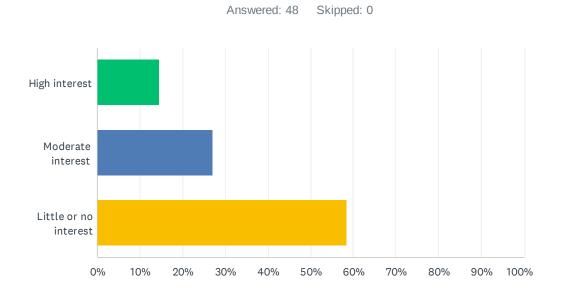
Q1 AFS-backed infrastructure legislation was recently signed into law. What impact do you envision the law's new investments will have on your foundry over the next several years?



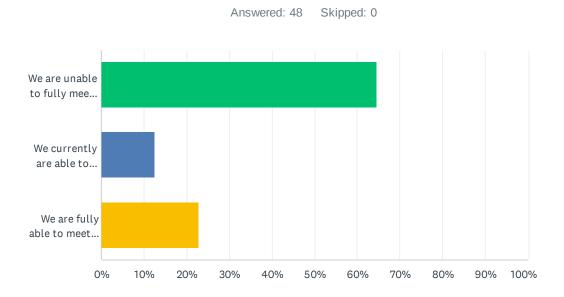
ANSWER CHOICES	RESPONSES	
Significantly more business	6.25%	3
Somewhat more business	37.50%	18
Slightly more business	22.92%	11
No impact	33.33%	16
TOTAL		48

Q2 What is your foundry's interest level in increasing or initiating sales to the federal government?



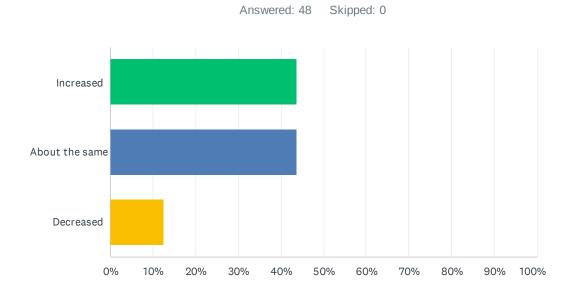
ANSWER CHOICES	RESPONSES	
High interest	14.58%	7
Moderate interest	27.08%	13
Little or no interest	58.33%	28
TOTAL		48

Q3 Some foundries report that the worker shortage is forcing them to turn down some orders that they otherwise would produce. Which best describes the situation at your foundry?



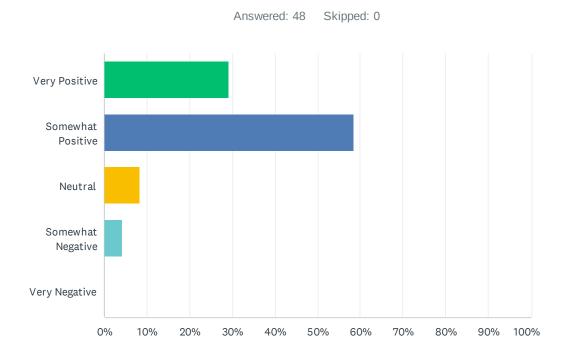
ANSWER CHOICES	RESPONSES	
We are unable to fully meet demand due to the worker shortage	64.58%	31
We currently are able to meet demand but expect that to change in 2022	12.50%	6
We are fully able to meet demand and expect that to stay the same in 2022	22.92%	11
TOTAL		48

Q4 How have your company's sales trended over the last 90 days?



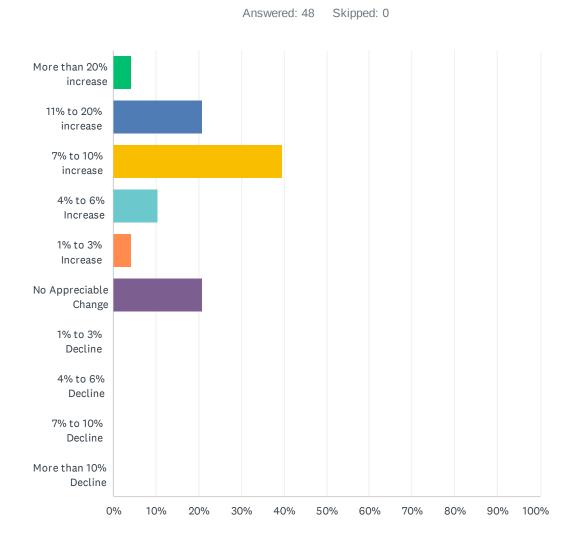
ANSWER CHOICES	RESPONSES	
Increased	43.75%	21
About the same	43.75%	21
Decreased	12.50%	6
TOTAL		48

Q5 What is your business outlook for the next 12 months?



ANSWER CHOICES	RESPONSES	
Very Positive	29.17%	14
Somewhat Positive	58.33%	28
Neutral	8.33%	4
Somewhat Negative	4.17%	2
Very Negative	0.00%	0
TOTAL		48

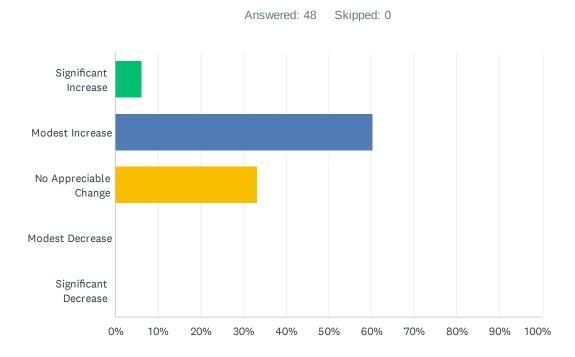
Q6 What are your foundry's sales projections for the next 12 months?



November/December 2021 Metalcasters Quarterly Outlook Survey

ANSWER CHOICES	RESPONSES	
More than 20% increase	4.17%	2
11% to 20% increase	20.83%	10
7% to 10% increase	39.58%	19
4% to 6% Increase	10.42%	5
1% to 3% Increase	4.17%	2
No Appreciable Change	20.83%	10
1% to 3% Decline	0.00%	0
4% to 6% Decline	0.00%	0
7% to 10% Decline	0.00%	0
More than 10% Decline	0.00%	0
TOTAL		48

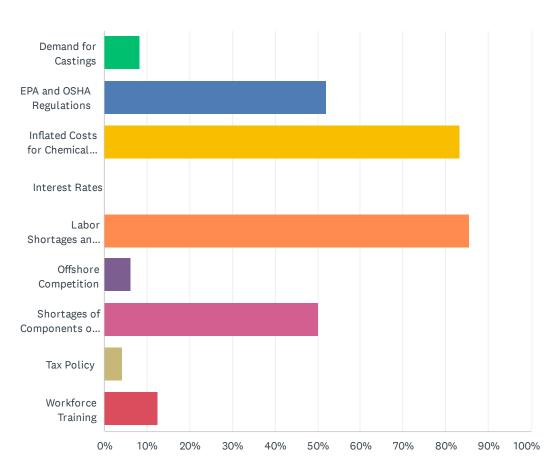
Q7 How do you expect the number of full-time employees in your facility to change over the next 12 months?



ANSWER CHOICES	RESPONSES	
Significant Increase	6.25%	3
Modest Increase	60.42%	29
No Appreciable Change	33.33%	16
Modest Decrease	0.00%	0
Significant Decrease	0.00%	0
TOTAL		48

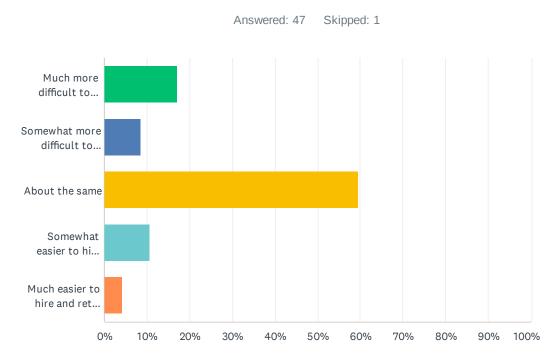
Q8 Which of these issues are the top 3 concerns or priorities for your company at this time?





ANSWER CHOICES	RESPONSES	
Demand for Castings	8.33%	4
EPA and OSHA Regulations	52.08%	25
Inflated Costs for Chemicals, Materials, or Scrap	83.33%	40
Interest Rates	0.00%	0
Labor Shortages and Costs	85.42%	41
Offshore Competition	6.25%	3
Shortages of Components or Supplies	50.00%	24
Tax Policy	4.17%	2
Workforce Training	12.50%	6
Total Respondents: 48		

Q9 Which statement best describes your ability to hire and retain workers compared to 3 months ago?



ANSWER CHOICES	RESPONSES	
Much more difficult to hire and retain than 3 months ago	17.02%	8
Somewhat more difficult to hire and retain than 3 months ago	8.51%	4
About the same	59.57%	28
Somewhat easier to hire and retain than 3 months ago	10.64%	5
Much easier to hire and retain than 3 months ago	4.26%	2
TOTAL		47

Q10 If you are facing worker shortages, what are the positions that are most difficult to fill and keep filled?

Answered: 40 Skipped: 8

#	RESPONSES	DATE
1	Iron pourers, shell machine operators	12/1/2021 3:30 AM
2	molders	11/30/2021 3:01 PM
3	Typically, Foundry pourer position.	11/30/2021 1:16 PM
4	Melter, pourer, machinist, welding and inspection roles. Essentially every skilled trade is incredibly challenging to recruit, even when we are willing to provide all the training necessary to become proficient in that skill.	11/30/2021 1:06 PM
5	Finish grinding	11/30/2021 12:56 PM
6	Skilled position labor with experience. Being a small business I cannot compete with Large corporations pay rates	11/30/2021 11:25 AM
7	foundry labor	11/30/2021 10:48 AM
8	Lead and Line workers	11/30/2021 10:45 AM
9	Entry level.	11/30/2021 10:39 AM
10	Industrial mechanics	11/21/2021 8:18 PM
11	All position, the availability of worker's is the problem.	11/19/2021 1:00 PM
12	Entry level	11/18/2021 7:44 AM
13	Skilled maintenance- specifically on off-shifts and weekends	11/17/2021 8:25 PM
14	Finishing (grinding)	11/17/2021 4:16 PM
15	Technical, NDT Radiography and Hourly	11/17/2021 1:08 PM
16	Production jobs grinding, melt, maintenance	11/17/2021 10:54 AM
17	plant workers	11/17/2021 10:23 AM
18	any position	11/17/2021 10:08 AM
19	Melt Laborer	11/17/2021 10:03 AM
20	all	11/17/2021 9:34 AM
21	Laborers, engineers	11/17/2021 7:53 AM
22	finishing operators	11/17/2021 7:44 AM
23	second shit	11/17/2021 7:11 AM
24	shake out and cleaning	11/17/2021 6:52 AM
25	Cleaning Room	11/17/2021 5:20 AM
26	Production team or more technical skills such as controls or IT	11/16/2021 9:49 PM
27	All	11/16/2021 6:31 PM
28	N/a	11/16/2021 5:53 PM
29	All production jobs!!!	11/16/2021 5:42 PM
30	molding	11/16/2021 4:10 PM

November/December 2021 Metalcasters Quarterly Outlook Survey

31	ALL POSITIONS on THE FLOOR	11/16/2021 4:08 PM
32	Foundry, welder, machinist	11/16/2021 3:59 PM
33	General labor	11/16/2021 3:44 PM
34	Skilled trades - Maintenance, Tooling Experienced Labor - Melting	11/16/2021 3:40 PM
35	General Labor	11/16/2021 3:39 PM
36	Skilled hourly workers, experienced technical professionals, and NDT workers.	11/16/2021 3:38 PM
37	Entry level production workers	11/16/2021 3:36 PM
38	all	11/16/2021 3:32 PM
39	All positions	11/16/2021 3:19 PM
40	Knockout, Heat Treat	11/16/2021 3:14 PM

Q11 What are the top supply-chain challenges facing your foundry? (List up to three.)

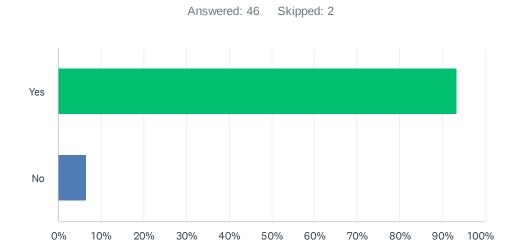
Answered: 42 Skipped: 6

#	RESPONSES	DATE
1	materials	12/1/2021 9:30 AM
2	Price increases, availability	12/1/2021 3:30 AM
3	steel ppsts	11/30/2021 3:01 PM
4	Volatile aluminum ingot prices, and stainless steel tubing (for cast-in components)	11/30/2021 1:16 PM
5	Resins, electrodes and spare parts for operating equipment	11/30/2021 1:06 PM
6	Scrap prices, certain raw materials unavailable and we've had to use less-effective/desirable substitutes until supply becomes available again	11/30/2021 12:56 PM
7	aluminum pricing	11/30/2021 11:25 AM
8	raw iron, electronics, additives	11/30/2021 10:48 AM
9	Transportation - Employees - Lead times	11/30/2021 10:45 AM
10	Irregularity in shipping and greatly increased cost in raw materials.	11/30/2021 10:41 AM
11	Product availability Price Freight	11/30/2021 10:39 AM
12	Foundry chemicals, and raw materials for key suppliers, unpredictable as to what will be next on the list	11/21/2021 8:18 PM
13	Scrap metal availability and increasing cost of raw materials and supplies	11/19/2021 1:00 PM
14	Increase stock of materials	11/19/2021 9:35 AM
15	Delays and price increases in alloys, sand, and MRO.	11/18/2021 7:44 AM
16	consumables	11/17/2021 8:25 PM
17	Magnesium, Silicon, General Parts	11/17/2021 4:16 PM
18	Zircon, Electrodes and Cost	11/17/2021 1:08 PM
19	Overseas raw materials, pig iron, carbon	11/17/2021 10:54 AM
20	plastics for pattern making. Risers, some alloys	11/17/2021 10:23 AM
21	availability of refractories, spare parts and metal	11/17/2021 10:08 AM
22	Scrap Metal, Innoculants, Equipment	11/17/2021 10:03 AM
23	Chemicals.	11/17/2021 7:53 AM
24	rising prices with little notice, trucking	11/17/2021 7:44 AM
25	scrap pig alloys mag bearing	11/17/2021 7:11 AM
26	on time delivery	11/17/2021 6:52 AM
27	Resin, wash, RIsers	11/17/2021 5:20 AM
28	Na	11/16/2021 9:49 PM
29	1) Increased costs. 2) Delays in receiving purchased materials.	11/16/2021 6:31 PM
30	Metallurgical Coke. Polyurethane rubber	11/16/2021 5:53 PM

November/December 2021 Metalcasters Quarterly Outlook Survey

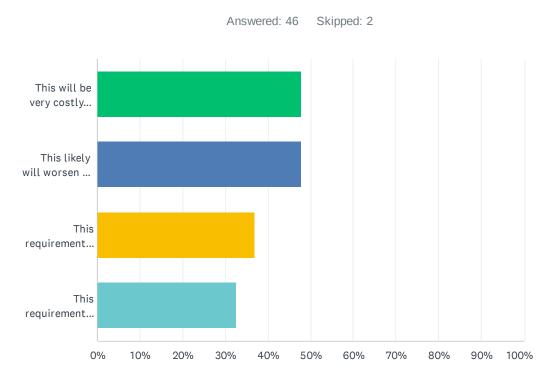
31	Scrap and alloy pricing alloy availability	11/16/2021 5:42 PM
32	NA	11/16/2021 4:10 PM
33	RESIN COSTS	11/16/2021 4:08 PM
34	Worldwide shortage of Magnesium due to China	11/16/2021 3:59 PM
35	1. Labor 2. Material coming from China	11/16/2021 3:44 PM
36	Which material is the next force majeure going to be issued for and do we have a backup supplier for it? What's the next price increase? Can we get trucks to move it?	11/16/2021 3:40 PM
37	Pricing	11/16/2021 3:39 PM
38	Magnesium alloy, rare earth additives, xray film	11/16/2021 3:38 PM
39	price inflation shortages of certain operating supplies shipping	11/16/2021 3:36 PM
40	cost increase lack of raw material for supplies resulting in change of materials increased frt costs	11/16/2021 3:32 PM
41	Sand transportation costs Resin price increases	11/16/2021 3:19 PM
42	Availability of aluminum ingot	11/16/2021 3:14 PM

Q12 Is your foundry located in the United States



ANSWER CHOICES	RESPONSES	
Yes	93.48%	43
No	6.52%	3
TOTAL		46

Q13 If the Biden Administration's weekly COVID-19 testing requirement for unvaccinated workers (currently under legal challenge) is fully implemented, which of the following statements would be accurate? (Check all that apply)



ANSWER CHOICES	RESPONSES	
This will be very costly and/or disruptive at our foundry	47.83%	22
This likely will worsen the worker shortage at our foundry	47.83%	22
This requirement seems unnecessary given our foundry's safety protocols		17
This requirement will have no appreciable impact at our foundry	32.61%	15
Total Respondents: 46		