

COVID-19 Print Business Indicators Research

A Path Forward





Volume 1, Number 2 JULY 2020

Table of Contents

INTRODUCTION	2
THE COVID-19 RESEARCH PANEL	3
EXECUTIVE SUMMARY KEY FINDINGS	
SECTION I — PARTICIPANT PROFILE	5
SECTION 2 — WHAT THE METRICS MEAN FOR YOUR BUSINESS	6
ALL COMPANIES SURVEYED	7
COMMERCIAL PRINTERS	9
GRAPHIC AND SIGN PRODUCERS	12
APPAREL DECORATORS	15
FUNCTIONAL PRINTERS	17
PACKAGE PRINTERS/CONVERTERS	19
SECTION 3 — PAYCHECK PROTECTION PROGRAM AND OTHER GOVE	RNMENT
AID	21
SECTION 4 — THE ECONOMY	23



INTRODUCTION

This is the second in a series of reports NAPCO Research and PRINTING United Alliance have created to examine the effects of the COVID-19 crisis on the printing industry, how printers are responding to the crisis, and how they can create a path forward.

The research is based on a bi-monthly survey that includes commercial printers, graphic and sign producers, apparel decorators, functional printers, and package printers/converters. (A profile of the participants is in Section I)

To measure movement during the crisis — Has a bottom been reached? Is there movement off bottom? Is the movement accelerating? — the survey tracks change in sales over the last 30 days rather than over a year ago. (To compare current conditions and pre-pandemic conditions is to compare apples and oranges.)

An index of current business indicators tracks which way sales, production, employment, prices, and pre-tax profitability are trending. A reading above 50.0 means more printing companies report business is picking up than report it is slowing down, while a reading below 50.0 means the opposite. An index of leading business indicators signals what's ahead by tracking work-on-hand, quote activity, production payroll hours, and confidence. A reading above 50.0 suggests activity will be picking up, while a reading below 50.0 suggests the opposite.

Participant comments on current and expected business conditions put the numbers in context. An analysis of the American economy's likely course and what it would mean for the printing industry supplements the survey results.

An expanded report exclusively for the nearly 400-member COVID-19 Research Panel includes even greater detail on where the printing industry is headed, why, and how to make what's ahead an opportunity rather than a threat.

For information about COVID-19 Printing Business Indicators Research, please contact our research team at: research@napco.com.



THE COVID-19 RESEARCH PANEL

Having a representative panel of regular participants in COVID-19 Print Business Indicators Research enhances our research capabilities and allows us to provide more accurate and reliable data. By having a large pool of consistent respondents, we are able to increase the comparability of the data from survey to survey. It also allows us to eliminate some of the non-response bias that can be a major source of error in survey data.

Building a panel also supports our ability to cultivate relationships with participants. By opening a line of communication with panel members, we can gain additional insight that goes beyond the scope of the survey questions. These interactions allow us to create a more detailed report and provides us with information that helps develop future surveys.

By joining the panel, you will not be required to provide any additional information. You simply agree to participate in future iterations of the surveys used to create this report. By doing so, you will receive an enhanced version of the report that includes additional information that can better help your business navigate this challenging environment.

The panel member version of this report includes a section on leadership and actions that can be taken to reduce some of the hardships resulting from COVID-19. These include:

- How to deal with employees during layoffs
- Lessons learned from countries that recovered earlier
- Information that can influence your client outreach methods during this time period

The panel version also includes a section that compares the data of states who had an earlier and later opening process.

To join the COVID-19 Research Panel, please click here

For information about the COVID-19 Research Panel, please contact David Wilaj, Economist, PRINTING United Alliance, dwilaj@printing.org, or Andy Paparozzi, Chief Economist, PRINTING United Alliance, apaparozzi@printing.org.



EXECUTIVE SUMMARY

More than 450 printing companies from across the United States and Canada participated in the second NAPCO Research/PRINTING United Alliance COVID-19 Print Business Indicators Survey. Topics included percent change in sales over the last 30 days (early May through early June), current trends in sales, production, quote activity, and confidence, how participants are staying in touch with clients, and their experiences with federal loan programs. Comparisons with results of our initial survey, which covered mid-March through mid-April, show the printing industry has taken a first step toward recovery.

Key Findings

- Sales continue to decline and are far below year-ago levels, but the rate of decline has moderated among all companies surveyed and in all five printing segments studied.
- More companies report sales, production, quote activity, and work-on-hand are trending higher compared to the deepest days of the COVID-19 crisis.
- A fragile optimism has developed: 48.0% of companies surveyed expect business to improve during the month ahead, up from 16.2% in mid-April. There is concern, however, that the upturn will not be sustained through year end.
- More companies are holding employment steady (59.6%, up from 40.7%) and fewer are reducing employment (33.7%, down from 57.7%) compared to early spring. Federal loans are the primary reason: 71.5% have received assistance through the Paycheck Protection Program and 30.7% through another federal program.
- Those who applied for PPP loans indicated that their employment was remaining consistent at a much higher rate than those who did not apply (63.1% compared to 48.6%).
- States that began their opening process earlier indicated that their sales, production, profitability, work on hand, quote activity, and production payroll were trending at a higher rate than those that lagged in the process. Early states' index of current and leading indicators were 36.7 and 38.7 respectively while lagging states were 34.0 and 31.9. (Panel Edition)
- Eighty percent (80.0%) of firms were maintaining lines of communication with their clients regardless
 of their operating situation. Most elected to continue their traditional methods of outreach (79.0%
 used email), while some used this as a time to try new techniques such as web based virtual
 teleconferencing. (Panel Edition)



SECTION I: PARTICIPANT PROFILE

Number surveyed: 452

Company Size: 2019 Sales (all sources)

2019 Sales (m=millions)	Percent
\$500,00 or less	20.8%
\$500,000+ to \$1M	14.2%
\$1M+ to \$3M	20.6%
\$3M+ to \$5M	9.5%
\$5M+ to \$10M	14.8%
\$10M+ to \$25M	8.2%
\$25M+ to \$50M	6.6%
\$50M+ to \$100M	1.8%
More than \$100M	3.5%

Primary Printing Segment

Segment	Percent
Commercial printer	66.2%
Graphic and sign producer	12.2%
Apparel decorator	8.8%
Package printer/converter	7.5%
Functional printer	4.9%

Location

Location*	Percent
United States	97.3%
West	20.8%
Pacific	12.8%
Mountain	8.0%
Midwest	31.2%
Plains	10.1%
North Central	20.1%
South	25.4%
South Central	7.3%
Southeastern	18.1%
East	19.9%
South Mid-Atlantic	3.3%
North Mid-Atlantic	11.5%
New England	5.1%
Canada	2.7%

^{*} Pacific: Alaska, California, Hawaii, Oregon, Washington. Mountain: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming. Plains: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota. North Central: Illinois, Indiana, Michigan, Ohio, Wisconsin. South Central: Arkansas, Louisiana, Oklahoma, Texas. Southeast: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee. South Mid-Atlantic: Delaware, District of Columbia, Maryland, Virginia, West Virginia. North Mid-Atlantic: New Jersey, New York, Pennsylvania. New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont



SECTION 2 — WHAT THE METRICS MEAN FOR YOUR BUSINESS

Among all companies surveyed and in all five printing segments covered, activity has picked up since the deepest days of the COVID-19 crisis. Sales are still contracting and are far below year-earlier levels, but the rate of contraction has slowed. Both the index of current business indicators and the index of leading business indicators have risen. And there is a fragile optimism best expressed by the commercial printer who explains, "With talk of a second wave in the fall, and also with PPP and EIDL funds running out before then, I would say we're more hopeful than confident."

Many we surveyed question whether the upturn will be sustained through year-end. Gains are choppy and inconsistent, making it difficult to determine if they are a blip or the start of a trend. An apparel decorator comments: "We expect the trend to continue upwards. However, it is very difficult to assess given so many outside variables and uncertainty. Also, we believe the trend up will be painfully slow and possibly take 18 months." A commercial printer adds: "Sales started dropping on March 13. We hit bottom on April 9. We bounced along the bottom until May 11, when order writing came off the bottom at an increasing rate. It's impossible to declare a long-term trend from this small data set." Companies in every segment studied report that customers are reopening but "taking a wait and see attitude."

Concern about the economy is widespread. Many we surveyed know this recession is about biology, not economics. The realities are captured by a graphic and sign producer who explains: "Given this crisis was triggered by a health crises and not an economic one, I think it's challenging to rely on historical trends/data in forecasting recoveries. Our primary markets are trade shows, amusement parks, events and sports. These have all been shut down and will be a shell of themselves for the foreseeable future until a vaccine or easy, daily testing is developed – basically until social distancing ends."

Large majorities in all segments studied are holding the line on prices. Between 83.9% (package printing/converting) and 71.6% (commercial printers) report that prices are stable, continuing the general resistance to price reductions we've seen throughout the crisis.

Finally, a significant number of companies have moved from reducing employment to holding it steady. Although positive, that's not the bullish signal it would normally be because most have brought employees back to satisfy PPP loan-forgiveness provisions, not to meet growing workloads. Representative comments: "We have maintained all staff due to a PPP loan — even if we have them staying home. Therefore, employment size has not changed. Without the loan we would be down 20%," and "PPP kept employees on payroll doing maintenance, cleanup, and repairs. Nothing in production."

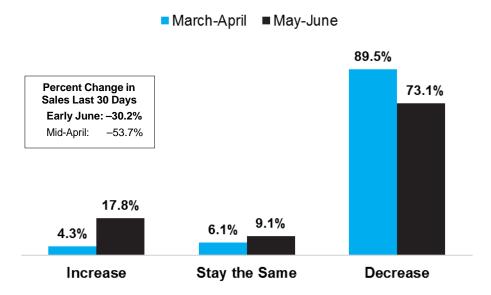
The specifics for all companies surveyed and by printing segment follow. (Participants were included in the segment they identified as their primary printing business.) Representative comments on current and expected conditions — we received more than 250 —capture both industry trends and the wide variation in the experiences and expectations of individual printing companies.



All Companies Surveyed

Average Change in Sales Last 30 Days

Sales decreased 30.2%, on average, from early May through early June for all companies surveyed, increasing for 17.8% and decreasing for 73.1%. Only under today's extraordinary circumstances would such results be positive: Sales fell an average of 53.7% from mid-March through mid-April, increasing for 4.3% and decreasing for 89.5%.



Q. What has happened to your total sales (all sources) over the last 30 days? n=449

Index of Current Indicators

The index of current business indicators has risen to 35.0 from 18.6, as more companies report sales are trending higher (27.7%, up from 5.6%) and more report production is trending higher (25.7%, up from 5.8%). Improvement in the bottom line is slight, but encouraging: 13.6% report pre-tax profitability is increasing, up from 4.0%, while 61.6% report it is decreasing, down from 80.8%.

May/Early June: 35.0 Mid-March/Mid-April: 18.6

		Current Trend		
Indicator	Period	Increasing	Staying the Same	Decreasing
Sales	May/Early June	27.7%	15.2%	57.1%
	Mid-March/Mid-April	5.6%	5.8%	88.6%
Production/Amount of Work	May/Early June	25.7%	14.5%	59.8%
	Mid-March/Mid-April	5.8%	7.2%	87.0%
Employment	May/Early June	6.7%	59.6%	33.7%
	Mid-March/Mid-April	1.6%	40.7%	57.7%
Prices	May/Early June	7.1%	74.6%	18.3%
	Mid-March/Mid-April	4.4%	74.7%	21.0%
Pre-Tax Profitability	May/Early June	13.6%	24.8%	61.6%
	Mid-March/Mid-April	4.0%	15.2%	80.8%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=448



Index of Leading Business Indicators

The index of leading business indicators has risen to 42.8 from 18.4. Work-on-hand, increasing for 23.7%, up from 5.6%, and quote activity, increasing for 27.5%, up from 4.4%, contributed to the advance. Confidence, however, was the big mover: 48.0% of printing companies surveyed now expect business to improve during the month ahead, up from 16.2% in early spring, as the American economy gradually reopens.

May/Early June: 42.8 Mid-March/Mid-April: 18.4

		Current Trend		
Indicator	Period	Increasing Staying the Same Decreas		
Work-On-Hand	May/Early June	23.7%	17.6%	58.7%
	Mid-March/Mid-April	5.6%	9.2%	85.2%
Quote Activity	May/Early June	27.5%	22.3%	50.2%
	Mid-March/Mid-April	4.4%	7.6%	88.0%
Production Payroll Hours	May/Early June	13.6%	38.8%	47.5%
	Mid-March/Mid-April	4.4%	19.2%	76.4%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=448

		Over the next month, we expect business to:				
Indicator	Period	Increase Stay the Same Decrease Not Sure				
Confidence	May/Early June	48.0%	21.9%	13.6%	16.5%	
	Mid-March/Mid-April	16.2%	28.5%	33.5%	21.8%	

Q. In relation to current conditions, do you expect business conditions for your company to improve, stay the same, or decline over the next month? n=448



Results by Segment

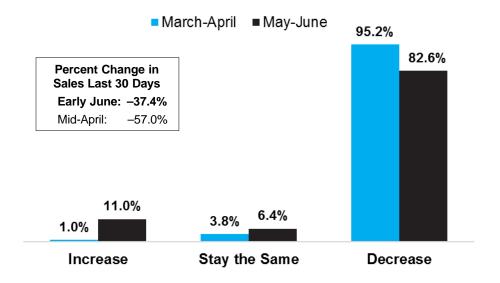
Results vary by segment for a number of reasons. Markets served is one. For example, commercial printers serve some of the markets hit hardest by the COVID-19 crisis, such as promotion of events, trade shows, conferences, and all manner of activities for both for-profit and non-profit businesses, while package printers/converters serve markets that have grown through the crisis, such as packaged food, healthcare, pharmaceuticals, and others designated as essential. Other reasons include how many companies surveyed have moved into producing PPE equipment and printing related to COVID-19, how many are located in states furthest along in reopening their economies, and how many have responded creatively and agilely to the crisis. The specifics differ, but all five segments studied show improvement since the start of the pandemic.

Commercial Printers

Average Change in Sales Last 30 Days

Sales fell 37.4%, on average, during the 30 days ending in early June for commercial printers surveyed, increasing for 11.0% and decreasing for 82.6%. That's better than two months earlier, when sales fell an average of 57.0%, increasing for 1.0% and decreasing for 95.2%.

Gains came primarily from COVID-19 printing: "COVID-19 signage is the only thing increasing." But the gains often have not offset losses in traditional markets: "Our sign division is running at the same level as we were pre-COVID, but our print side is down 75%," and "We're seeing fairly steady business in the large/wide format area, due to COVID signage/messaging opportunities, but our commercial print, sheetfed, and small-format business is struggling, due to many customers/industries being shut down or drastically reduced (automotive finance, conferences, clients with sales forces that use catalogs, etc.)."



Q. What has happened to your total sales (all sources) over the last 30 days? n=299



Index of Current Indicators

The index of current business indicators has increased to 30.1 from 15.7. Sales are trending up for 22.7%, and production is trending up for 20.1%. In early spring those numbers were 1.6% and 1.9%, respectively. There are questions about sustainability — "Sales picked up slightly in the past two weeks, but that is not a true indicator of sustained sales" — and an emphasis on perspective — "Things are picking up slowly, but are still way below pre-COVID."

May/Early June: 30.1 Mid-March/Mid-April: 15.7

		Current Trend		
Indicator	Period	Increasing	Staying the Same	Decreasing
Sales	May/Early June	22.7%	12.4%	64.9%
	Mid-March/Mid-April	1.6%	4.8%	93.6%
Production/Amount of Work	May/Early June	20.1%	14.0%	65.9%
	Mid-March/Mid-April	1.9%	5.1%	92.9%
Employment	May/Early June	2.3%	61.2%	36.5%
	Mid-March/Mid-April	0.6%	41.8%	57.6%
Prices	May/Early June	5.7%	71.6%	22.7%
	Mid-March/Mid-April	3.9%	72.3%	23.8%
Pre-Tax Profitability	May/Early June	9.0%	22.1%	68.9%
	Mid-March/Mid-April	2.3%	11.9%	85.9%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=299

Index of Leading Business Indicators

The Index of leading business indicators has risen to 39.5 from 15.2, as more commercial printers report work-on-hand (18.1%, up from 2.9%) and quote activity (20.8%, up from 1.3%) are trending higher. Additionally, 48.5% expect business to improve during the month ahead, triple last spring's 15.8%. The reason: "The worst seems to be over. Work is coming back as the world opens up."

May/Early June: 39.5 Mid-March/Mid-April: 15.2

		Current Trend		
Indicator	Period	Increasing Staying the Same Decreas		
Work-On-Hand	Mav/Early June	18.1%	19.0%	62.9%
	Mid-March/Mid-April	2.9%	5.8%	91.3%
Quote Activity	May/Early June	20.8%	24.4%	54.8%
	Mid-March/Mid-April	1.3%	4.8%	93.9%
Production Payroll Hours	May/Early June	8.7%	40.8%	50.5%
	Mid-March/Mid-April	1.9%	18.4%	79.7%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=299

		Over the next month, we expect business to:				
Indicator	Period	Increase Stay the Same Decrease Not Su				
Confidence	May/Early June	48.5%	20.4%	11.4%	19.7%	
	Mid-March/Mid-April	15.8%	27.0%	35.4%	21.9%	

Q. In relation to current conditions, do you expect business conditions for your company to improve, stay the same, or decline over the next month? n=299



Comments on Current and Expected Business Conditions

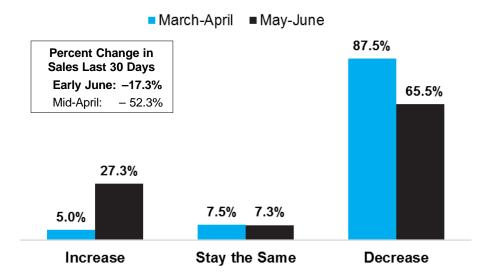
- "Printing children's guides for home schooling and mail-in ballots for district budgets kept us very busy. If not for these orders, we would have been very slow."
- "Customers are reopening and they need to market their goods/services. I think the upturn is sustainable, but only to a point: We expect the fall of 2020 to be 10-15% below 2019. Certain industries – tourism, travel, retail – have taken huge hits and will not come back to 2019 levels in such a short time."
- "Many clients are engaged but not ordering. We are seeing an uptick in signage and other retail re-opening needs."
- "We serve very diversified markets: tourism, non-profits, medical, manufacturing, university, and retail. None of them are growing currently other than some one-time COVID-19 related purchases, such as single-use menus or floor graphics. A few sectors seem stable, but none are growing. It's too soon for trends."
- "Our largest customer has suspended a project, several customers have cancelled or held orders (school systems), retail and manufacturers have cancelled open-house mailings, etc."
- "We are open but most of our customers are closed."
- "Lots of event cancellations trade shows, annual meetings, conferences, etc. which in turn eliminated hundreds of projects usually generated for those events."
- "With all spring activities cancelled (not postponed) the missed work is irretrievable."
- "Basically dead in the water. And a few of our customers will not be coming back, I suspect."
- "Basically a slow, minimal increase since March 15. We did receive a PPP loan, so everyone was brought back on the payroll. Otherwise, we'd have about 20% of our workforce furloughed."
- "PPP helped buy time, but everyone is same boat: No working capital. PPP kept employees on payroll doing maintenance, cleanup, and repairs. Nothing in production. Helped them with paycheck but left owners cash-flow negative. Help is needed to survive."



Graphic and Sign Producers

Average Change in Sales Last 30 Days

Sales decreased 17.3%, on average, from early May through early June for graphic and sign producers surveyed. Sales increased for 27.3% and decreased for 65.5%. From mid-March through mid-April, sales fell an average of 52.3%, increasing for 5.0% and decreasing for 87.5%. The reopening of the economy is one reason for the moderation: "Increases in all activities since May 1. Our major retailer and restaurant customers are back online." Printing needs created by the pandemic is another: "We're going crazy printing signs for grads and social distancing," and "We have lost out on trade show and event graphics, but have easily made them up in social distancing graphics and related."



Q. What has happened to your total sales (all sources) over the last 30 days? n=55



Index of Current Indicators

The index of current business indicators has risen to 40.9 from 20.3, as reports that sales are trending up increase to 30.4% from 7.6% and reports that production is trending up increase to 37.5% from 7.6%. The bottom line has also improved a bit: Pre-tax profitability is trending up for 19.6%, unchanged for 26.8%, and trending down for 53.6%. Two months ago the corresponding numbers were 6.3%, 13.9%, and 79.7%.

May/Early June: 40.9 Mid-March/Mid-April: 20.3

		Current Trend		
Indicator	Period	Increasing	Staying the Same	Decreasing
Sales	May/Early June	30.4%	19.6%	50.0%
	Mid-March/Mid-April	7.6%	6.3%	86.1%
Production/Amount of Work	May/Early June	37.5%	14.3%	48.2%
	Mid-March/Mid-April	7.6%	7.6%	84.8%
Employment	May/Early June	8.9%	64.3%	26.8%
	Mid-March/Mid-April	0.0%	50.6%	49.4%
Prices	May/Early June	5.4%	80.4%	14.3%
	Mid-March/Mid-April	5.1%	70.9%	24.1%
Pre-Tax Profitability	May/Early June	19.6%	26.8%	53.6%
	Mid-March/Mid-April	6.3%	13.9%	79.7%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=56

Index of Leading Business Indicators

The Index of leading business indicators has risen to 47.8 from 19.5. Work-on-hand is trending higher for 32.1%, up from 7.6%, and quote activity is trending higher for 37.5%, also up from 7.6%. More than 46.0% expect business to improve during the month ahead; just 15.2% did in early spring.

May/Early June: 47.8 Mid-March/Mid-April: 19.5

		Current Trend		
Indicator	Period	Increasing	Staying the Same	Decreasing
Work-On-Hand	Mav/Early June	32.1%	12.5%	55.4%
	Mid-March/Mid-April	7.6%	6.3%	86.1%
Quote Activity	May/Early June	37.5%	25.0%	37.5%
	Mid-March/Mid-April	7.6%	8.9%	83.5%
Production Payroll Hours	May/Early June	19.6%	35.7%	44.6%
	Mid-March/Mid-April	2.5%	22.8%	74.7%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=56

		Over the next month, we expect business to:				
Indicator	Period	Increase Stay the Same Decrease Not S				
Confidence	May/Early June	46.4%	25.0%	16.1%	12.5%	
	Mid-March/Mid-April	15.2%	25.3%	32.9%	26.6%	

Q. In relation to current conditions, do you expect business conditions for your company to improve, stay the same, or decline over the next month? n=56



Comments on Current and Expected Business Conditions.

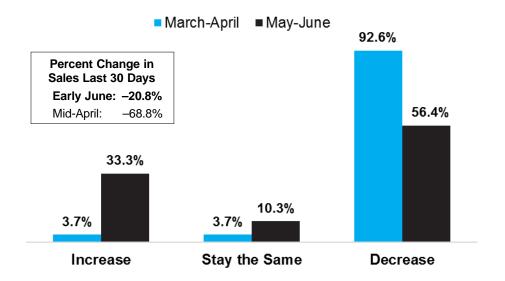
- "Things are starting to get busy as retailers plan to reopen."
- "Our sales have increased, particularly in the PPE segment. And we have significantly shifted to face shields and zone distancing equipment and messaging."
- "Being able to quickly see the need of our clients for PPE items and responding rapidly was the key for us. We pivoted a good amount of our operation to PPE items (face shields, barriers, face masks, COVID19 messaging) to great success. I believe it will be sustainable through the rest of the year. Many of our 'core' accounts were deemed essential business, and we were able to expand our new PPE services to them. Now that the country is opening up again, many of our larger retailers that were shuttered are asking us for these products and services as well, which will allow us to extend the growth into the rest of 2020."
- "Key parts of our business have completely dried up, e.g., trade shows, building upkeep and maintenance, and event planning."
- "We are short-staffed (self-quarantined high risk employees), and work is slowly increasing to a fraction of the level it should be for this time of year."
- "Sales are better, but we have been running a discount the past month. Sales are still nowhere near this time last year."
- "We may need to start lowering prices."
- "Very recent uptick in orders, but can't yet call it a trend."
- "Business decisions and purchasing by brand owner clients are being put on hold, delayed, and/or cancelled. My firm has grave concerns over the next 90 days."
- "Most customers are taking a wait-and-see attitude. We are seeing some pick up as they find opportunities for COVID-19 products/services."
- We have maintained all staff due to PPP loan even if we have them staying home. Therefore, employment size has not changed. Without the loan we would be down 20%."



Apparel Decorators

Average Change in Sales Last 30 Days

Sales fell 20.8%, on average, during the 30 days ending in early June for apparel decorators surveyed, a significant moderation from the 68.8% average decline from mid-March through mid-April. One-third report sales increased, up from 3.7%, while 56.4% report sales declined, down from 92.6%. The gains are encouraging but must be kept in perspective: "Of course sales have increased — we we're allowed to reopen our businesses. That does not mean there is enough work to sustain."



Q. What has happened to your total sales (all sources) over the last 30 days? n=39

Index of Current Indicators

The index of current business indicators has risen to 46.5 from 14.7. Sales are trending higher for 47.5% and production for 40.0%, both up from 1.9% two months ago.

May/Early June: 46.5 Mid-March/Mid-April: 14.7

		Current Trend		
Indicator	Period	Increasing	Staying the Same	Decreasing
Sales	May/Early June	47.5%	15.0%	37.5%
	Mid-March/Mid-April	1.9%	7.4%	90.7%
Production/Amount of Work	May/Early June	40.0%	7.5%	52.5%
	Mid-March/Mid-April	1.9%	5.6%	92.6%
Employment	May/Early June	17.5%	52.5%	30.0%
	Mid-March/Mid-April	0.0%	20.4%	79.6%
Prices	May/Early June	15.0%	77.5%	7.5%
	Mid-March/Mid-April	5.6%	77.8%	16.7%
Pre-Tax Profitability	May/Early June	25.0%	22.5%	52.5%
	Mid-March/Mid-April	1.9%	13.0%	85.2%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=40



Index of Leading Business Indicators

The Index of leading business indicators has risen to 50.0 from 15.8. Work-on-hand is trending up for 37.5%, and quote activity is trending up for 47.5%. In mid-April not one of the apparel decorators we surveyed reported work-on-hand was rising, and just 1.9% reported quote activity was rising.

Confidence is up sharply, with 55.0% now expecting business to improve during the month ahead, compared with just 13.0% in mid-April. But one apparel decorator explains, "We are fortunate that we produce school uniforms, and families are already purchasing for next school year. This may change if school isn't on campus this fall." A colleague adds, "My business is based on schools and sports. COVID took them both from me. Business will fold if schools don't do back in the fall." Comparable comments could be made about any printing segment, reinforcing how uncertain the future is for everyone.

May/Early June: 50.0 Mid-March/Mid-April: 15.8

		Current Trend			
Indicator	Period	Increasing	Staying the Same	Decreasing	
Work-On-Hand	Mav/Early June	37.5%	12.5%	50.0%	
	Mid-March/Mid-April	0.0%	18.5%	81.5%	
Quote Activity	May/Early June	47.5%	10.0%	42.5%	
	Mid-March/Mid-April	1.9%	11.1%	87.0%	
Production Payroll Hours	May/Early June	25.0%	25.0%	50.0%	
	Mid-March/Mid-April	1.9%	9.3%	88.9%	

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=40

		Over the next month, we expect business to:				
Indicator	Period	Increase Stay the Same Decrease Not Su				
Confidence	May/Early June	55.0%	15.0%	22.5%	7.5%	
	Mid-March/Mid-April	13.0%	33.3%	33.3%	20.4%	

Q. In relation to current conditions, do you expect business conditions for your company to improve, stay the same, or decline over the next month?

n=40

Current and Expected Business Conditions

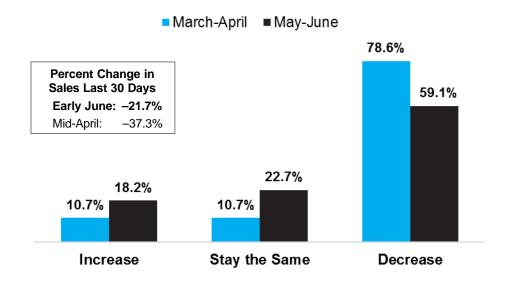
- "Business is definitely on the incline. We aren't fully where we want to be, but things are getting better by the day."
- "As of the second to last week of May, we saw a steep increase in sales from 10% capacity to 110% this week and last week. Hoping we'll normalize in the coming weeks."
- "We have a lot of face-cover business and an increase in consumer e-commerce activity."
- "All things are starting to increase, especially our online commerce customers."
- "Even though we are seeing a small uptick in business versus previous 30 days, it's still around 85% less versus May 2019."
- "Selling PPE stuff is why our sales have increased."
- "Only laser etching and marking for liquor distributors has kept me in the game."



Functional Printers

Average Change in Sales Last 30 Days

Sales fell 21.7%, on average, from early May through early June for functional printers surveyed, increasing for 18.2% and decreasing for 59.1%. In comparison, sales were down 37.3%, on average, from mid-March through mid-April, increasing for 10.7% and decreasing for 78.6%.



Q. What has happened to your total sales (all sources) over the last 30 days? n=22

Index of Current Indicators

The index of current business indicators has risen to 38.1 from 27.1, as sales trend higher for 23.8%, up from 10.7%, and production trends higher for 23.8%, up from 14.3%. A statement of the general experience of functional printers surveyed: "Essential manufacturing and COVID printed services maintained us at 65% during economic shutdown. Now we are slowly increasing work orders with other nonessential commercial printing."

May/Early June: 38.1 Mid-March/Mid-April: 27.1

		Current Trend		
Indicator	Period	Increasing	Staying the Same	Decreasing
Sales	May/Early June	23.8%	23.8%	52.4%
	Mid-March/Mid-April	10.7%	10.7%	78.6%
Production/Amount of Work	May/Early June	23.8%	9.5%	66.7%
	Mid-March/Mid-April	14.3%	21.4%	64.3%
Employment	May/Early June	28.6%	33.3%	38.1%
	Mid-March/Mid-April	0.0%	35.7%	64.3%
Prices	May/Early June	9.5%	81.0%	9.5%
	Mid-March/Mid-April	3.6%	89.3%	7.1%
Pre-Tax Profitability	May/Early June	19.0%	23.8%	57.1%
	Mid-March/Mid-April	10.7%	35.7%	53.6%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=21



Index of Leading Business Indicators

The Index of leading business indicators has increased to 41.7 from 29.0. Growing optimism is the main reason: 47.6% expect business to improve during the month ahead, up from 28.6% in early spring. More functional printers reporting that work-on-hand is rising (23.8%, up from 14.3%) and more that quote activity is rising (28.6%, up from 10.7%) also contributed to the advance.

May/Early June: 41.7 Mid-March/Mid-April: 29.0

		Current Trend			
Indicator	Period	Increasing	Staying the Same	Decreasing	
Work-On-Hand	Mav/Early June	23.8%	14.3%	61.9%	
	Mid-March/Mid-April	14.3%	17.9%	67.9%	
Quote Activity	May/Early June	28.6%	9.5%	61.9%	
	Mid-March/Mid-April	10.7%	10.7%	78.6%	
Production Payroll Hours	May/Early June	23.8%	28.6%	47.6%	
	Mid-March/Mid-April	10.7%	32.1%	57.1%	

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=21

		Over the next month, we expect business to:				
Indicator	Period	Increase Stay the Same Decrease No				
Confidence	May/Early June	47.6%	23.8%	19.0%	9.5%	
	Mid-March/Mid-April	28.6%	32.1%	28.6%	10.7%	

Q. In relation to current conditions, do you expect business conditions for your company to improve, stay the same, or decline over the next month?

n=21

Comments on Current and Expected Business Conditions

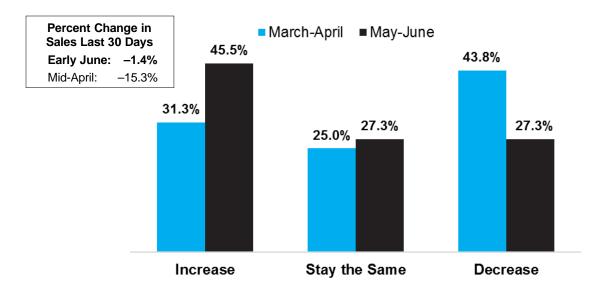
- "Our medical customers are ordering way more than what we had forecasted them for. Is it sustainable through year-end? It's hard to say. We're still seeing more growth, but we're not sure how long it will continue."
- "Our doors remained open, so it's more or less been business as usual. Our increase was due to our medical customers increasing orders."
- "With our state opening, business is steadily returning to normal."
- "Backlogs are decreasing. If sales do not pick up by end of July, we will have to have lay off personal."
- "Business always has increases and decreases. Generally, we've seen a steady flow with a
 couple of soft spots over the last two weeks. March and April were booming. May came back to
 normal and June is following suit."



Package Printers/Converters

Average Change in Sales Last 30 Days

The contraction has been least severe — 1.4% from early May through early June and 15.3% from mid-March through mid-April, on average — for packaging printers/converters surveyed. The primary reasons: Many serve essential industries, such as pharmaceuticals, medical, and packaged foods with long shelf lives, and many have moved into PPE production.



Q. What has happened to your total sales (all sources) over the last 30 days? n=32

Index of Current Indicators

The index of current business indicators has risen to 54.8 from 45.2, with improvement in both the top line and bottom line. Specifically, sales are trending higher for 48.4%, up from 44.8%, and trending lower for 25.8%, down from 48.3%, while profitability is trending higher for 29.0%, up from 13.8%, and trending lower for 31.6%, down from 48.3%.

May/Early June: 54.8 Mid-March/Mid-April: 45.2

		Current Trend		
Indicator	Period	Increasing	Staying the Same	Decreasing
Sales	May/Early June	48.4%	25.8%	25.8%
	Mid-March/Mid-April	44.8%	6.9%	48.3%
Production/Amount of Work	May/Early June	41.9%	29.0%	29.0%
	Mid-March/Mid-April	41.4%	17.2%	41.4%
Employment	May/Early June	16.1%	64.5%	19.4%
	Mid-March/Mid-April	20.7%	44.8%	34.5%
Prices	May/Early June	12.9%	83.9%	3.2%
	Mid-March/Mid-April	6.9%	89.7%	3.4%
Pre-Tax Profitability	May/Early June	29.0%	48.4%	22.6%
	Mid-March/Mid-April	13.8%	37.9%	48.3%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=31



Index of Leading Business Indicators

The index of leading business indicators has risen to 56.9 from 44.8. Work-on-hand is rising for 45.2%, up from 31.0%, and quote activity is rising for 48.4%, up from 27.6%. Nearly 36.0% expect business to improve during the month ahead, double last spring's 17.2%. And clarity is increasing: Just 9.7% report business is too inconsistent to project even 30 days out, down from 20.7% in mid-April.

As in every segment studied, however, sales are well below year-ago levels for many package printers/converters surveyed — "A slight uptick in sales the past 30 days, but still considerably off year over year" — and there is concern that the May-June advance will not be sustained — "Work has picked up, but not steady yet."

May/Early June: 56.9 Mid-March/Mid-April: 44.8

		Current Trend			
Indicator	Period	Increasing	Staying the Same	Decreasing	
Work-On-Hand	Mav/Early June	45.2%	19.4%	35.5%	
	Mid-March/Mid-April	31.0%	27.6%	41.4%	
Quote Activity	May/Early June	48.4%	19.4%	32.3%	
	Mid-March/Mid-April	27.6%	24.1%	48.3%	
Production Payroll Hours	May/Early June	29.0%	51.6%	19.4%	
-	Mid-March/Mid-April	34.5%	24.1%	41.4%	

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=31

		Over the next month, we expect business to:				
Indicator	Period	Increase Stay the Same Decrease Not				
Confidence	May/Early June	35.5%	38.7%	16.1%	9.7%	
	Mid-March/Mid-April	17.2%	41.4%	20.7%	20.7%	

Q. In relation to current conditions, do you expect business conditions for your company to improve, stay the same, or decline over the next month? n=31

Comments on Current and Expected Business Conditions

- "As an essential business, most of our customers are also essential. We have also seen some new business due to Covid-19."
- "We produce items that have dramatically increased in volume due to COVID19."
- "Increase is coming from existing customers. Note some customers have decreased sales considerably. These would be customers that serviced the school districts and restaurants."
- "Amount of activity in the last few weeks is picking up."
- "All activity is substantially lower."
- "Increased sales in certain segments have offset decreased sales in others."
- "Have been required to shut down by order of local/state mandate."
- "Our customers were shut down or reduced their operations therefore we are not getting quotes."



SECTION 3 — PAYCHECK PROTECTION PROGRAM AND OTHER GOVERNMENT AID

Throughout the nationwide shutdown, the government has provided unprecedented stimulus for small businesses. Through a variety of loans, the U.S. Small Business Administration and the Federal Reserve have aided in the survival of millions of small business and have helped to keep millions of workers on their respective payrolls.

Many printers have taken advantage of these programs as around 85% of printers surveyed have applied for at least one of these federally funded loans, with the Paycheck Protection Program being the most popular. Companies also had the most success when applying for this particular loan. 96.7% of those who applied were approved to receive the funds with 2.1% more still waiting to hear back. The table below shows application and approval rates for the other types of loans that were available.

Loan Type	% of Printers Applying	% Approved	% Declined	% Pending
Paycheck Protection Program	77.0%	96.7%	1.2%	2.1%
SBA Economic Injury Disaster Loan	23.7%	63.6%	6.1%	30.3%
SBA Economic Injury Disaster Loan Advance	13.4%	70.4%	1.9%	27.8%
SBA Debt Relief and Enhanced Debt Relief	5.1%	52.9%	5.9%	41.2%
SBA Express Bridge Loan	3.3%	75.0%	0.0%	25.0%
Main Street Lending Program	2.5%	25.0%	25.0%	50.0%
Other	7.4%	53.3%	30.0%	16.7%
Have not applied	15.6%			

Q. Have you applied for a loan through any of the following programs? Was your application approved for the following loan(s)? n=448

The goal of the Paycheck Protection Program was to allow companies to keep their staff on payroll during the shutdown period. In order to see if it was effective for printers, employment trends for companies that did and did not apply for the loan were given a closer look. It is easy to see that those who did apply seem to be in a better position in terms of retaining staff and reducing the possibility of layoffs in the near future.

	Current Trend - Employment				
	Stay the Same	Improve	Decline		
Applied for PPP	63.1%	5.3%	31.6%		
Did Not Apply	48.6%	11.0%	40.4%		

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? N=448

When the PPP was first made available, there were many issues that made the program look as if it may struggle to be effective. As time went on and program requirements were better explained and more funding was made available, the process became much smoother. When asked about their experience with the process, the responses were generally positive but around 1/3rd explained negative experiences.

Many praised their local banks for helping then navigate the process. If you are still looking to get the loan, perhaps it is a good idea to avoid large financial institutions and try a smaller firm:

• "It was positive and easy. We have a great relationship with our banker, and they qualified us as a business who would need the loan and they helped us tremendously along the way."



- "Very positive. Our local bank was totally on top of it. Done in a day."
- "A local bank helped our entire community when the big banks were too slow. They will definitely get new business"
- "Big banks were bad. Most success through small, local banks; especially if it is with the bank that did the original SBA funding."

Others discussed frustration with missing the first round but had better luck during the second round of funding. If you stopped trying after the first round of funding, perhaps try once more:

- "First wave was pretty frustrating, wasn't able to even apply due to demand. Was able to apply
 and get approved during the second wave, pretty favorable but hectic and stressful due to first
 experience."
- "We missed the first wave with Chase during our slowest time and when we were most affected but got the second round funding and the process was relatively smooth."
- "Round 1 a joke, Round 2 already had a head start and was approved quickly."

Although the PPP made changes that better explained the forgiveness requirements, some firms spent their funds quickly which is resulting in headaches throughout this portion of the process. It is advised that you get a head start on this and to reach out to the bank that helped to secure your loan with any additional questions or concerns.

PPP Latest News:

- New deadline for applications is August 8
- Still \$130 billion in funding remaining
- Businesses now have 24 weeks to spend the funds. (was 8 weeks)
- Portion of loan that must be spent on payroll drops to 60% (was 75%)



SECTION 4 — THE ECONOMY

As states have begun their individual reopening processes, it appears that the economy has already hit its lowest point and we are now on the path towards recovery. That is not to say that things will immediately return to the "new normal." Some industries will see consumer habits recover with more haste, while others still face a long road before any sense of normalcy is returned. Those in the hospitality, events, and travel space will find that their recovery process will take much longer as people may still feel uncomfortable being among large groups.

Unemployment

In terms of economic indicators, there are many signs pointing to the fact that recovery may come quicker than originally thought. The May unemployment rate, as released by the Bureau of Labor Statistics, was 13.3%. Although this was much higher than the near-record low of 3.5% seen before COVID-related shutdowns, many analysts believed that the rate would be closer to 20% for May. This shows that many returned to work quicker than projected. 2.5 million returned to work in May with more than half, around 1.3 million, coming from the bar and restaurant industry. This showed that these establishments were not only allowed to open up but anticipated crowds to begin showing up as well.

Another employment metric that is trending in the right direction is the initial jobless claims number. In mid-April, this number reached its peak with nearly 7 million people applying for unemployment benefits for the first time. Since then, this number has dropped every week. Weekly drops were significant until mid-May, but have since leveled out near the 1.5 million mark. As far as getting back to the number of claims seen in early March — just 215,750, on average— it will most likely take years to reach those levels.



Source: Federal Reserve of St. Louis (FRED)

Consumer Spending

Consumer spending has long been the anchor of the United States economy, and related statistics show that this has also already bottomed out and has begun the road to recovery. After seeing record drops of 8.3% and 14.7% in March and April respectively, consumer retail purchases rebounded by rising a record 17.7% in May. This number will surely rise again in June as reopening broadens, but expectations are



tempered. It is unlikely to see another jump in the upper teens as much of the May jump can be attributed to pent-up demand that was satisfied last month. Personal consumption – another metric that determines how much Americans spent on goods and services – also rose by a record breaking 8.2% in May. This rise is more than double that of the previous record which can also be directly connected to pent-up demand. It is also important not to discount the effect of the stimulus checks on these numbers as they have supported these positive trends. The last indicator that sheds some positive light on consumer spending is the consumer sentiment index released by the University of Michigan. In June, this number rose by 8% signaling that rapid consumer spending habits will show up when this month's numbers are released as well.

Because print is so wide reaching, the additional dollars spent by consumers will surely find their way into printer pockets. As this type of spending increases, businesses will return to their normal marketing budgets which will aid industry recovery. It will also provide a boost for those who produce packaging and labels for items that aren't household staples. Those who do this for household staples already saw a large increase in volumes as stores couldn't keep their shelves stocked quick enough. The jump experienced by other packaging and label printers wont be nearly as swift, but it will surely be positively affected by increased consumer spending.

Other signs that the economy is heading towards recovery:

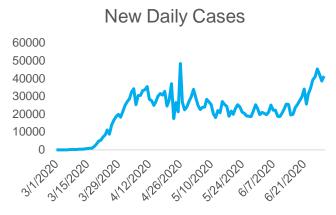
- Prices for raw materials such as oil and copper have responded significantly, which typically signals global economic growth
- U.S. purchasing managers index (PMI) for manufacturing hit its highest point in five months (52.6) indicating growth, while its services' PMI echoed that and reached 57.1.
- The Kansas City, New York and Philadelphia Federal Reserve manufacturing surveys all show that optimism is increasing among respondents
- Home sales rose by 16.6% in May
- New orders for manufactured goods increased 8% in May

Update on COVID-19 Cases

Although signs are pointing to swift economic recovery, all could be thrown off course if a second wave of virus cases forces portions of the economy to shut down once again. Some states have seen significant spikes within the past few weeks, and the effects can already be seen. In particular, Arizona, Florida, New Mexico, South Carolina, and Texas have seen cases rise since their reopening. These states have seen the number of hours worked at small business drop since it hit its recent peak in mid-June and have halted some of their reopening procedures momentarily, as Texas and Florida have ordered the reclosure of bars. It is expected that more states that see spikes will amend their reopening plan and either halt or roll back the process.

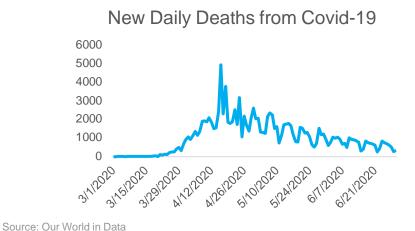
The graph below shows the number of daily new cases in the U.S. through June 30th. It is easy to see why some are concerned about a second wave, as numbers have spiked significantly in recent days. Some attribute the rise to increased testing capacity which may be true but that does not ease concerns for many others who believe that reopening may have come too early.





Source: Our World in Data

Although the new case numbers can be disheartening, there is some good news in regards to the number of deaths caused by the virus. Since hitting its peak in mid-April, the number of people dying from COVID-19 has been dropping consistently. The graph below shows the number of daily deaths attributed to the virus through June 30th. It is also important to consider that there is typically a lag effect for the number of deaths, so an uptick is possible within the weeks after a rise in cases.



Government Stimulus

Throughout the last few months, the federal government has provided unprecedented aid to help companies remain solvent and retain workers. Although these programs got off to a rocky start due to inconsistent messaging, they have more recently found their footing and have been much more efficient in getting money to those in need. Recent changes also made it easier to qualify for loan forgiveness, but these changes may have come too late for some small businesses across the country as they quickly used up their funds. So far, the following amounts have been allocated:

- Paycheck Protection Program 4,675,868 loans worth \$515+ billion have been approved
- EIDL 1,775,539 loans worth \$113+ billion have been approved
- EIDL Advance 3,740,346 loans worth \$12 billion have been approved

There are still funds available from the U.S. Small Business Administration, so if you are still in need, check the requirements to see if you qualify.



Other government aid that aimed to boost the economy came in the form of checks sent directly to millions of Americans, most worth \$1200. These payments did help for a period of time, but some have been asking whether or not it was enough. Recently, the President announced that he was pushing for a second round of similar payments that were to be "very generous." The full details have not yet been released and must still be approved by both the Senate and the House. It is also rumored that the pool of qualified recipients will be lower than the first time around. Either way, this money will surely help some Americans which can have a positive effect on consumer spending and the economy as a whole. This is a developing story which will most likely have a conclusion by the end of July.

Conclusion

A second wave of cases and shutdowns will have brutal effects on the economy and businesses across the country if it occurs. Do not panic, but understand this is a possibility. Keep up to date on your state's data and announcements by policy makers. (Visit the PRINTING United Alliance/NAPCO Media COVID-19 Resource Channel regularly, https://www.piworld.com/extension/covid-19/.) Consider developing a plan of action in case this occurs and learn from mistakes that you may have made the first time around.

In the unprecedented situation that we are currently facing, the economic environment can be very dynamic. Some indicators and the direction of the economy can set out on a different course within days. It is nearly impossible to chart the effects even a few days out, so some of the information in this section can change. Data and information presented in this economic section is updated through June 30th.





Custom Data-Centric Solutions

WHAT NAPCO RESEARCH CAN DO FOR YOU?

- NAPCO Research CRAFTS actionable data-centric solutions that leverage our highly engaged media audiences, industry subject matter experts and in-house research expertise.
- We partner with our clients to **IDENTIFY** their unique business challenges and create solutions that **ENABLE** deeply informed decision-making and **DELIVER** results.
- Gain access to NAPCO Media's & PRINTING United Alliance's engaged audiences of industry executives across key industries.

NAPCO RESEARCH DELIVERS...

MARKET INTELLIGENCE

- Landscape Analysis
- Competitive Assessment
- Analyst Presentations at Events
- Benchmarking
- Industry & Economic Trends
- User Research & Analysis

BUSINESS DEVELOPMENT

- White Papers & Thought Leadership
- Lead Generation
- Sales Training
- Research-Based Webinars
- Brand Awareness and Market **Positioning**
- Printer Growth Strategies & Capital Investment Research

ACCESS NAPCO & PRINTING UNITED ALLIANCE'S AUDIENCES & PANELS OF MORE THAN

700K+ FOR:

- Surveys, focus groups
- Distribution of thought leadership for lead-generation

THE NAPCO RESEARCH DIFFERENCE









NAPCO RESEARCH CLIENTS

















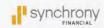






RICOH







MEET THE RESEARCH TEAM



Andy Paparozzi Chief Economist PRINTING United Alliance apaparozzi@printing.org



Nathan Safran Vice President, Research **NAPCO Media** nsafran@napco.com



Lisa Cross Principal Analyst NAPCO Media lcross@napco.com



Evan West Associate Analyst ewest@napco.com



David Wilaj **Economist** PRINTING United Alliance dwilaj@printing.org



WHO WE ARE

PRINTING United Alliance is the new entity borne of the merger between Specialty Graphic Imaging Association (SGIA) and Printing Industries of America (PIA). In a milestone in the printing industry, SGIA and PIA officially combined in 2020 to create the largest, most comprehensive member-based printing and graphic arts association in the United States.

Members now have unparalleled access to preeminent education, training, workshops, events, research, government and legislative representation, safety and environmental sustainability guidance, as well as resources from the leading media company in the industry – NAPCO Media.

PRINTING United Alliance produces the PRINTING United Expo and Conference, the most influential days in printing. The expansive display of technology and supplies, education, programming, and services are showcased to the industry at large, and represents all market segments in one easily accessed place. In 2020, PRINTING United introduced the PRINTING United Digital Experience. For more information, visit PRINTINGUnited.com.