



COVID-19 BUSINESS IMPACT SURVEY WAVE 7

May 30, 2020

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EXECUTIVE SUMMARY

DEMOGRAPHICS

- The geographic location of respondents' organizations are statistically similar to all previous waves.
- Throughout all waves, roughly half of firms report fewer than 50 FTEs. The percentage of firms falling into higher FTE ranges has also remained constant.
 - The median number of FTEs in Wave 7 is 29 compared to 26 in Wave 6, 25 in Waves 5 and 4, 26.5 in Wave 3 and 23 in the first two waves.
 - Compared to Wave 1, there are significantly fewer firms in Wave 7 with 10 or fewer employees (31% vs. 25%).
 - The largest organization in Wave 7 has 7,500 FTEs. This figure has fluctuated between 11,000 and 7,500 throughout the series.

ECONOMIC SENTIMENT

- As in Wave 6, the vast majority of firms (82%) still feel the condition of the US Economy is worse compared to March 1. However, firms are slightly less negative regarding their cash flow compared to previous waves.
 - Firms with 25 or fewer FTEs are more likely than other firms to say their finances (42%) and cash flow (43%) are worse today.
- Firms are less optimistic in Wave 7 about a “return to normal” within six months compared to Waves 6 and 5 (23% vs. 27% and 37%). Conversely, more firms feel it will take 12 to 18 months compared to Waves 6 and 5 (47% vs. 36% and 27%).
 - Smaller firms are slightly more optimistic than larger firms. While roughly one out of four firms with 50 or fewer FTEs feel business will return to normal within six months, only one out of eight firms with more than 200 FTEs feel the same.

BUSINESS IMPACTS

- Firms plan to take additional cost cutting actions in the next 90 days including freezing non-essential purchases (45%), speeding up collections (39%) and freezing salary / pay increases (28%).
 - Firms with more than 500 FTEs are much more likely to say they will lay-off staff (27%) and/or contractor temps (27%).
- The trend continues of more firms working on new projects directly related to the COVID-19 pandemic response compared to Waves 6 and 5 (16% vs. 12% and 8%).
 - Larger firms are more likely to be working on new projects directly related to COVID-19 compared to smaller firms.
 - 0 to 25 FTEs = 10%
 - 26 to 50 FTEs = 11%
 - 51 to 200 FTEs = 24%
 - 201 to 500 FTEs = 34%
 - 501 or more FTEs = 36%

BUSINESS IMPACTS (CONT'D)

- Almost one-fourth of firms (22%) report having business areas that are outperforming now. This marks a significant increase from the previous two waves (12%).
 - Larger firms are more likely to have business areas that are outperforming, although the increase was seen across all firm sizes.
 - 0 to 25 FTEs = 12%
 - 26 to 50 FTEs = 24%
 - 51 to 200 FTEs = 30%
 - 201 to 500 FTEs = 40%
 - 501 or more FTEs = 59%
- Although a plurality of firms (36%) feel public projects will recover more quickly than private projects, opinions are split and nearly one-fourth (24%) are not sure.
 - Firms with more than 500 FTEs are more likely to feel public projects will recover more quickly than private projects (55%).

IMPACT OF FEDERAL STIMULUS PROGRAM

- Perceptions of the CARES Act Are at their highest level since the question was asked in the survey. Three-fourths (75%) of firms rate it positively.
 - Positive perceptions of the CARES act are highest among firms with up to 200 FTEs, after which positive perceptions decline.
- Nearly nine out of ten firms (89%) with 500 or fewer FTE applied and received approval for a PPP Loan.
 - Firms with 25 or fewer FTE are less likely than other firms to have received a PPP loan.
 - 0 to 25 FTEs = 85%
 - 26 to 50 FTEs = 95%
 - 51 to 200 FTEs = 94%
 - 201 to 500 FTEs = 91%
 - 501 or more FTEs = Not Applicable

IMPACT OF FEDERAL STIMULUS PROGRAM (CONT'D)

- Although most firms (71%) feel they will be able to use the PPP loan within the eight week “forgiveness” window, nearly three out of ten (29%) say they will not be able to or are not sure.
 - Firms with 51 or more FTE are less likely than smaller firms to feel they can use the loan within the eight week window.
- Nearly eight out of ten firms (79%) say extending the PPP Loan Forgiveness window from eight weeks to 16 or 24 weeks would have a positive impact on their firm.

PLANS TO RE-OPEN OFFICES

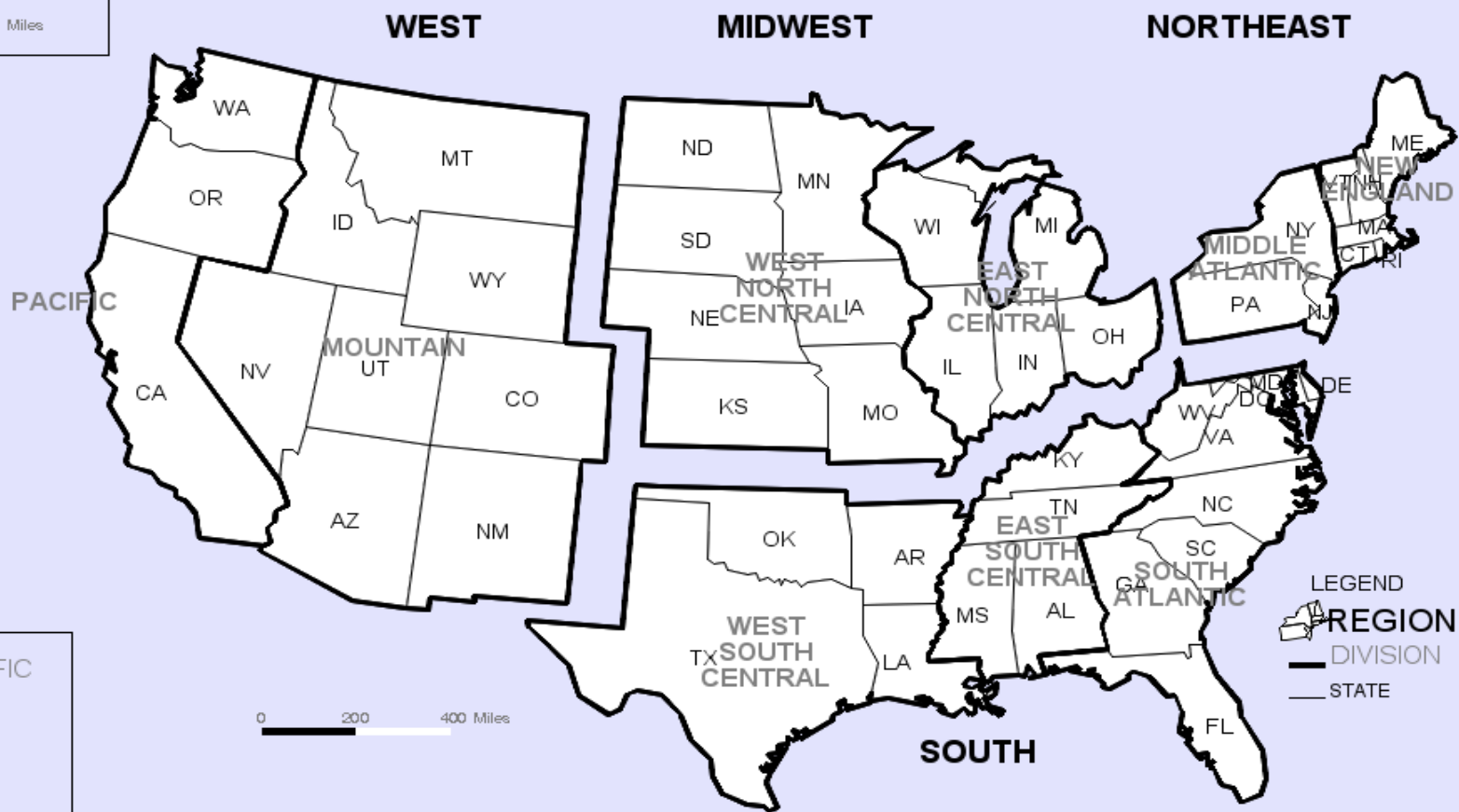
- A majority of firms (61%) have either already re-opened or never closed. Most of the rest plan to re-open in the next 30 to 90 days (27%).
 - Smaller firms are more likely to have never closed or already re-opened compared to larger firms.
 - 0 to 25 FTEs = 69% “Never closed / already re-opened”
 - 26 to 50 FTEs = 58%
 - 51 to 200 FTEs = 54%
 - 201 to 500 FTEs = 46%
 - 501 or more FTEs = 32%
 - Nonetheless, nearly all firms will re-open their offices in the next 30 to 60 days.
- The number of firms that have created a plan for ensuring the safety of staff continues to climb. The percentage has grown from 20% in Wave 5 to 74% in Wave 7.
 - After removing firms for whom this question does not apply, firms with more than 25 FTEs are slightly more likely to either have a plan or to be working on one.
 - 0 to 25 FTEs = 92% “Have or working on one”
 - 26 to 50 FTEs = 98%
 - 51 to 200 FTEs = 99%
 - 201 to 500 FTEs = 100%
 - 501 or more FTEs = 100%

LIKELIHOOD OF TRAVELING

- Very few firms indicate they are likely to allow air travel to conferences / meetings / events with more than 50 attendees (14% or less). The event will need to have 10 or fewer attendees to attract a plurality of firms (45%).
- Firms are much more likely to allow travel by car to conferences / meetings / events compared to air travel. However, the event will need to have 20 or fewer attendees to attract at least half of firms.
- Although more than half of firms (60%) are likely to allow air travel to in-person client meetings in the next six months, allowing travel by car is even more likely (83%).
 - Although there are no statistically significant differences by firm size when allowing travel by car to in-person client meetings, there are differences when considering air travel. Smaller firms are less likely to allow air travel to client meetings than larger firms:
 - 0 to 25 FTEs = 54% “Definitely/Probably Will
 - 26 to 50 FTEs = 58%
 - 51 to 200 FTEs = 66%
 - 201 to 500 FTEs = 77%
 - 501 or more FTEs = 77%

DEMOGRAPHICS

Census Regions and Divisions of the United States

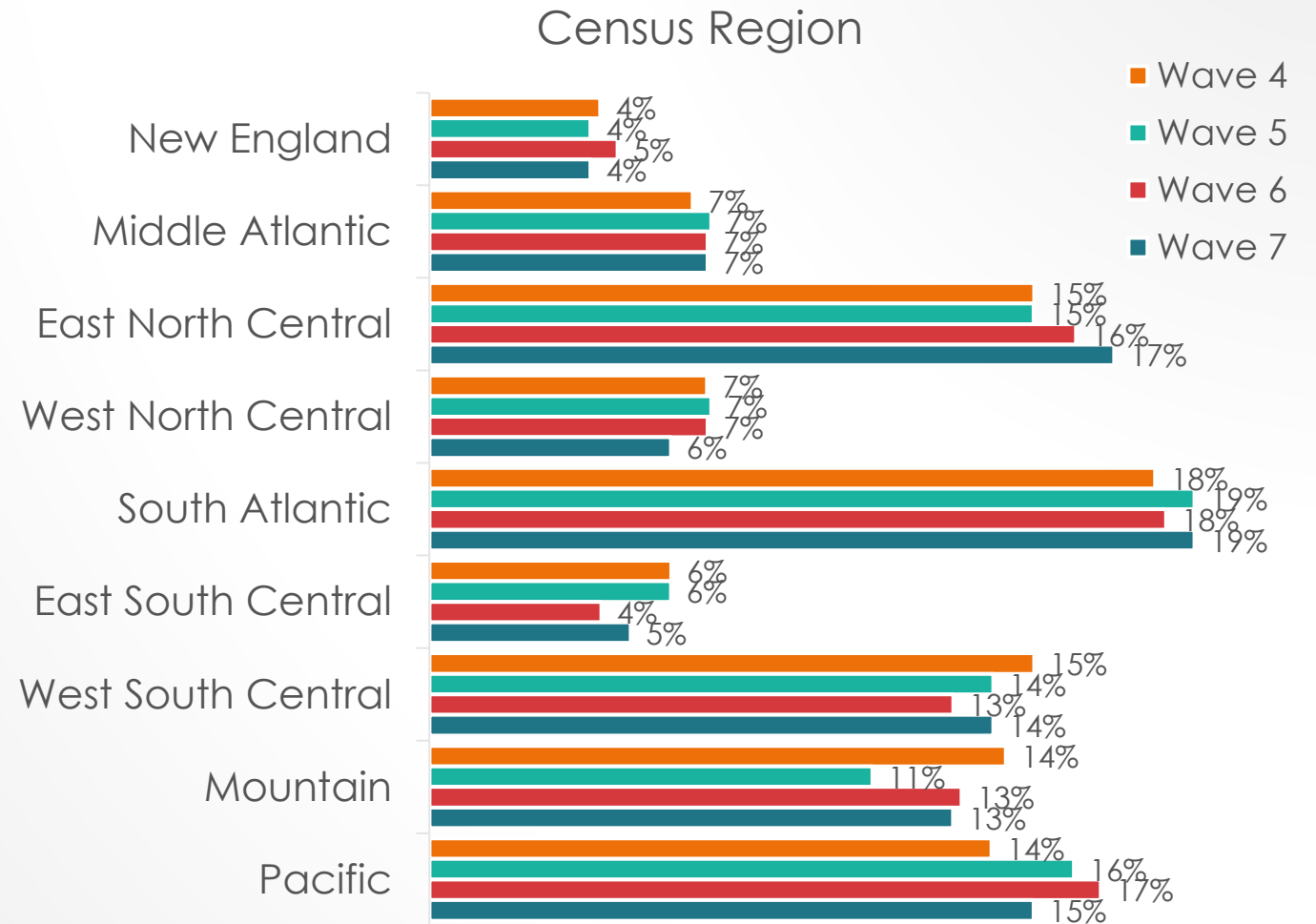


U.S. Department of Commerce Economics and Statistics Administration U.S. Census Bureau (Not) Prepared by the Geography Division

Imitation of http://www.census.gov/geo/www/us_regdiv.pdf

THE GEOGRAPHIC LOCATION OF RESPONDENTS' ORGANIZATIONS ARE STATISTICALLY SIMILAR IN ALL WAVES.

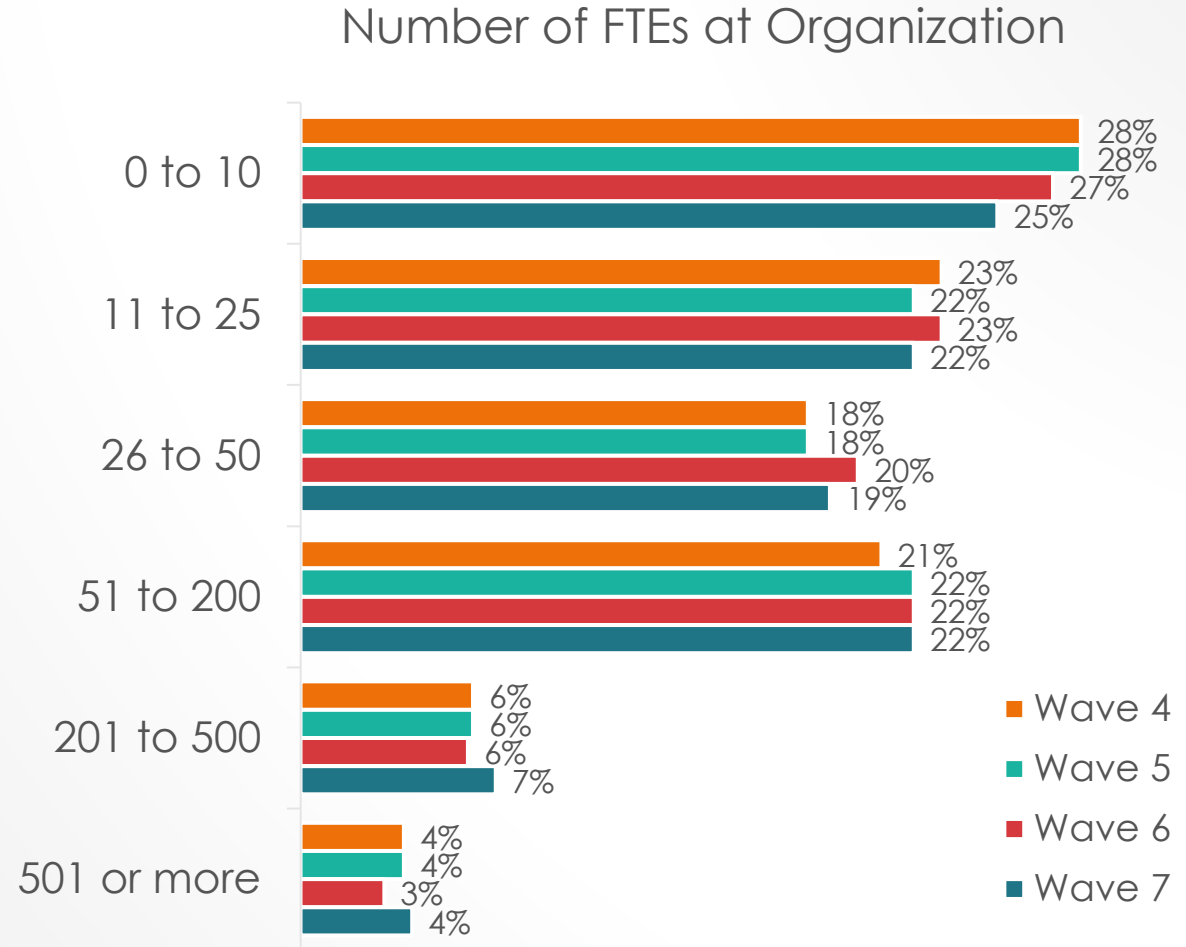
- Only the most recent four waves are shown in the graph.



Q2. In which state is your organization headquartered?
 Wave 4 - n = 566, Wave 5 - n = 512, Wave 6 - n = 492, Wave 7 - n = 538

THROUGHOUT ALL WAVES, ROUGHLY HALF OF FIRMS REPORT FEWER THAN 50 FTES. THE PERCENTAGE OF FIRMS FALLING INTO HIGHER FTE RANGES HAS ALSO REMAINED CONSTANT.

- Only the most recent four waves are shown in the graph.
- The median number of FTEs in Wave 7 is 29 compared to 26 in Wave 6, 25 in Waves 5 and 4, 26.5 in Wave 3 and 23 in the first two waves.
- Compared to Wave 1, there are significantly fewer firms in Wave 7 with 10 or fewer employees (31% vs. 25%).
- The largest organization in Wave 7 has 7,500 FTEs. This figure has fluctuated between 11,000 and 7,500 throughout the series.
- Throughout this report all questions are reported by firm size and statistically significant differences are noted.



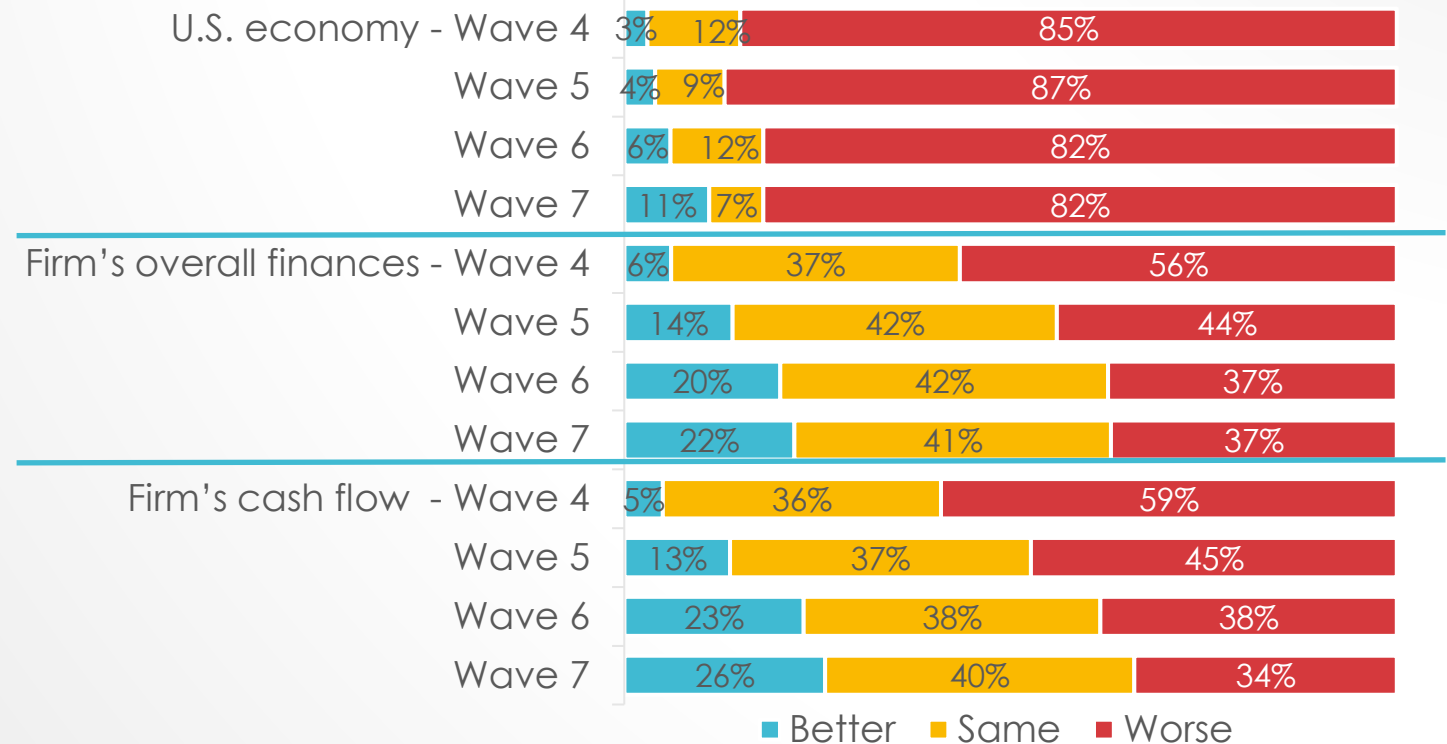
Q3. Including yourself, how many full-time equivalent employees (FTEs) do you have? If you are not sure, please provide your best estimate.
 Wave 4 - n = 566, Wave 5 - n = 512, Wave 6 n = 492 , Wave 7 n = 538

ECONOMIC SENTIMENT

AS IN WAVE 6, THE VAST MAJORITY OF FIRMS (82%) STILL FEEL THE CONDITION OF THE US ECONOMY IS WORSE COMPARED TO MARCH 1. HOWEVER, FIRMS ARE SLIGHTLY LESS NEGATIVE REGARDING THEIR CASH FLOW COMPARED TO PREVIOUS WAVES.

- Only the most recent four waves are shown in the graph.
- As has been the case in previous waves, there is one statistically significant difference by firm size:
 - Firms with 25 or fewer FTEs are more likely than other firms to say their finances (42%) and cash flow (43%) are worse today.

Economic Sentiment Today Compared to March 1*



Q4. Compared to March 1, how do you feel about each of the following today?
 "Not sure" responses omitted from calculations

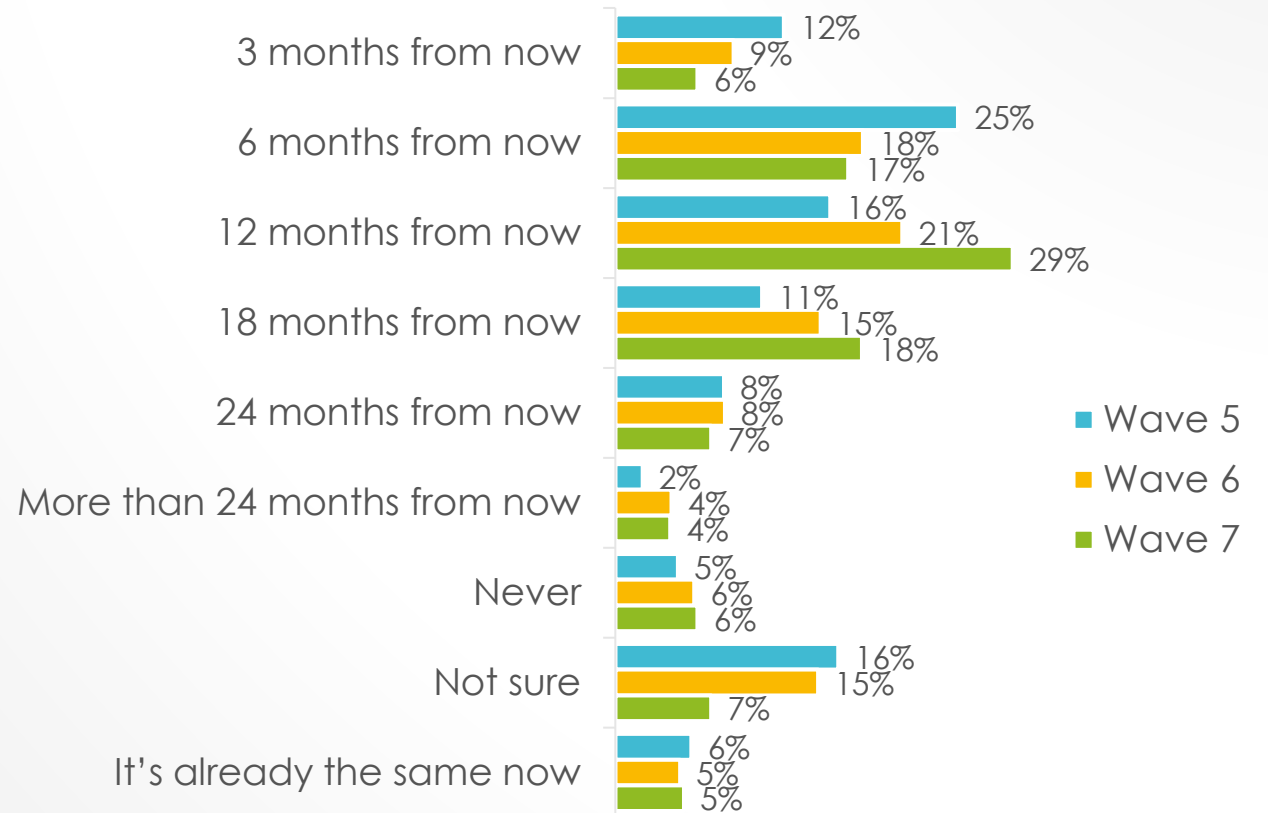
Wave 4 - n = 557 - 555, Wave 5 - n = 510 - 504, Wave 6 - n = 492 - 491, Wave 7 - n = 536 - 535

* Not asked in Waves 1 and 2

FIRMS ARE LESS OPTIMISTIC IN WAVE 7 ABOUT A “RETURN TO NORMAL” WITHIN SIX MONTHS COMPARED TO WAVES 6 AND 5 (23% VS. 27% AND 37%). CONVERSELY, MORE FIRMS FEEL IT WILL TAKE 12 TO 18 MONTHS COMPARED TO WAVES 6 AND 5 (47% VS. 36% AND 27%).

- Smaller firms are slightly more optimistic than larger firms. While roughly one out of four firms with 50 or fewer FTEs feel business will return to normal within six months, only one out of eight firms with more than 200 FTEs feel the same.

Anticipation of Business Returning to Normal*



* Not asked prior to Wave 5

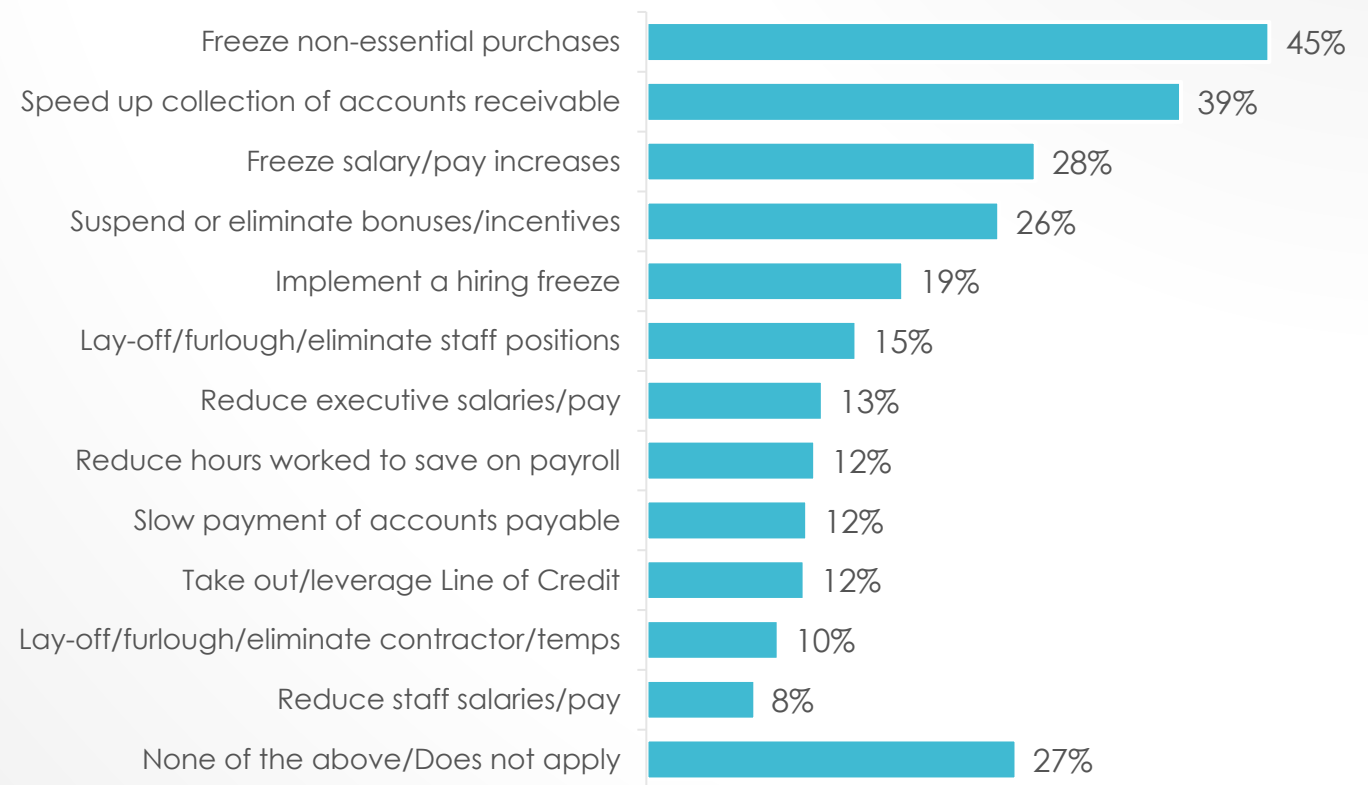
Q17. When do you anticipate your business will return to normal, meaning the way it was before the current pandemic?
Wave 5 - n = 507, Wave 6 - n = 485, Wave 7 - n = 530

BUSINESS IMPACTS

FIRMS PLAN TO TAKE ADDITIONAL COST CUTTING ACTIONS IN THE NEXT 90 DAYS INCLUDING FREEZING NON-ESSENTIAL PURCHASES (45%), SPEEDING UP COLLECTIONS (39%) AND FREEZING SALARY/PAY INCREASES (28%).

- Firms with more than 500 FTEs are much more likely to say they will lay-off staff (27%) and/or contractor/temps (27%).
- Few firms have taken the following actions:
 - Suspend or eliminate retirement benefit contributions (5%)
 - Take out a loan (5%)
 - Pause/defer stock buy-backs (3%)
 - Permanently close office(s) (1%)

Additional Cost Cutting/Cash Management Actions Anticipated in Next 90 Days*



* Not asked in previous waves.

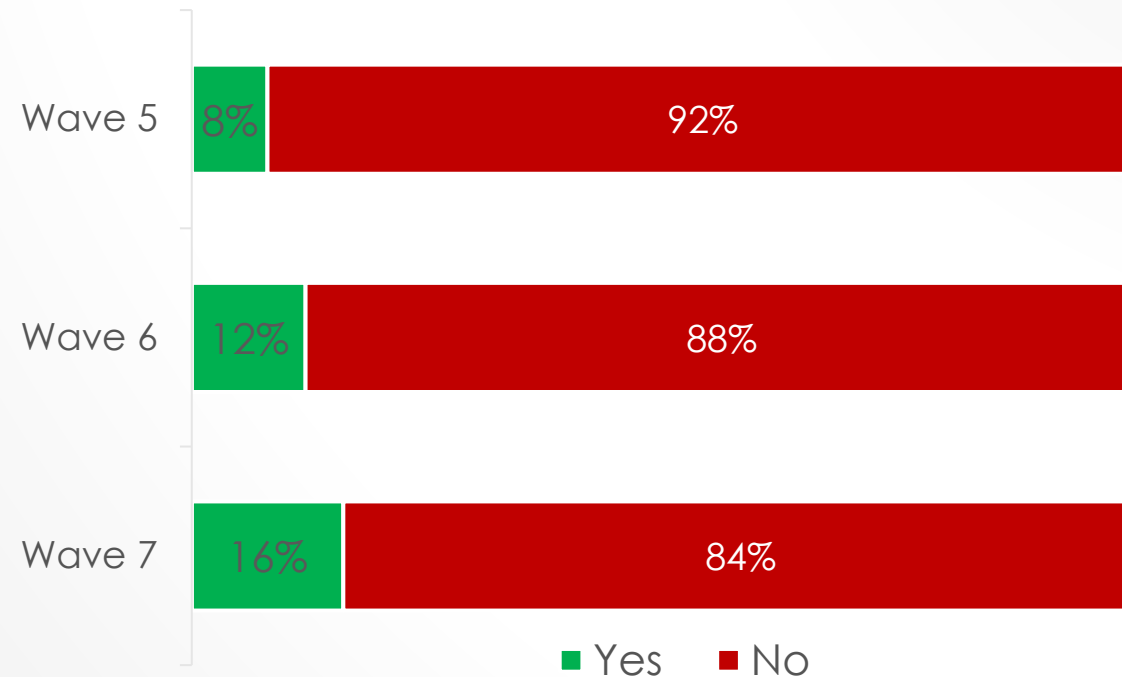
Q9. Not counting actions your firm has already taken, looking forward, which of the following cost cutting/cash management actions, if any, does your firm plan to initiate in the next 90 days? Select All That Apply

Wave 7 - n = 491

THE TREND CONTINUES OF MORE FIRMS WORKING ON NEW PROJECTS DIRECTLY RELATED TO THE COVID-19 PANDEMIC RESPONSE COMPARED TO WAVES 6 AND 5 (16% VS. 12% AND 8%).

- Larger firms are more likely to be working on new projects directly related to COVID-19 compared to smaller firms.
 - 0 to 25 FTEs = 10% "Yes"
 - 26 to 50 FTEs = 11%
 - 51 to 200 FTEs = 24%
 - 201 to 500 FTEs = 34%
 - 501 or more FTEs = 36%

Incidence of Working on New Projects Directly Related to COVID-19 Response*



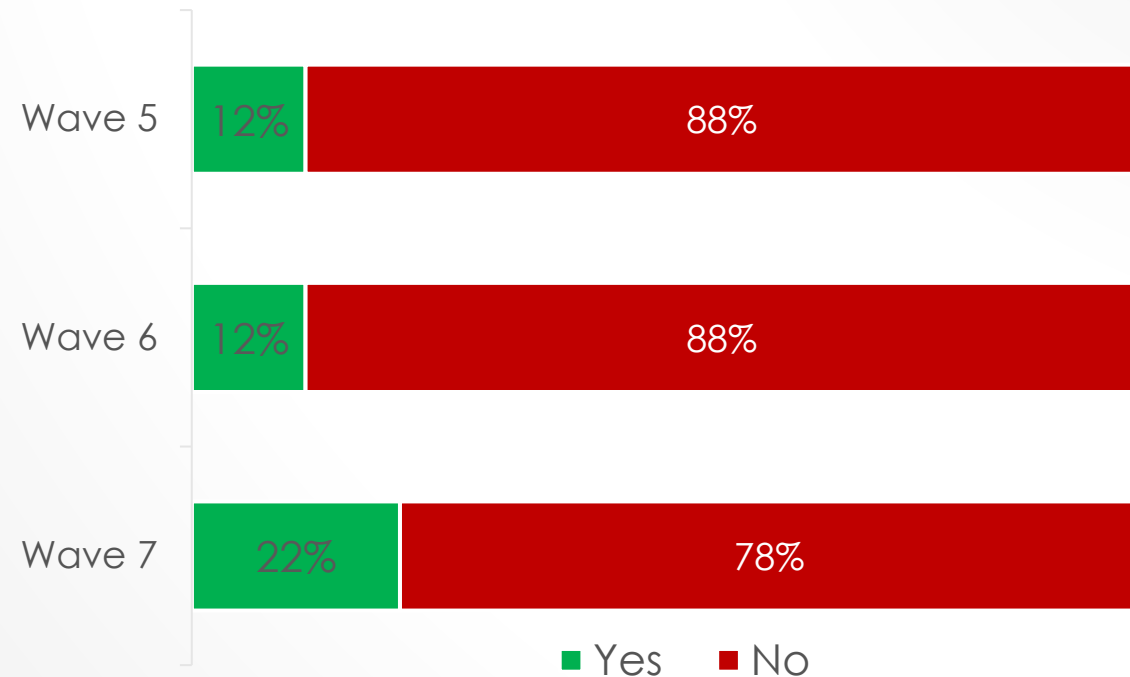
* Not asked prior to Wave 5

Q14. Is your firm working on, or has it worked on, any NEW projects or expanded projects directly related to supporting the COVID-19 pandemic response?
Wave 5 - n = 504, Wave 6 - n = 486, Wave 7 - n = 538

ALMOST ONE-FOURTH OF FIRMS (22%) REPORT HAVING BUSINESS AREAS THAT ARE OUTPERFORMING NOW. THIS MARKS A SIGNIFICANT INCREASE FROM THE PREVIOUS TWO WAVES (12%).

- Larger firms are more likely to have business areas that are outperforming, although the increase was seen across all firm sizes.
 - 0 to 25 FTEs = 12% "Yes"
 - 26 to 50 FTEs = 24%
 - 51 to 200 FTEs = 30%
 - 201 to 500 FTEs = 40%
 - 501 or more FTEs = 59%

Incidence of Firms With Business Areas That Are Outperforming*



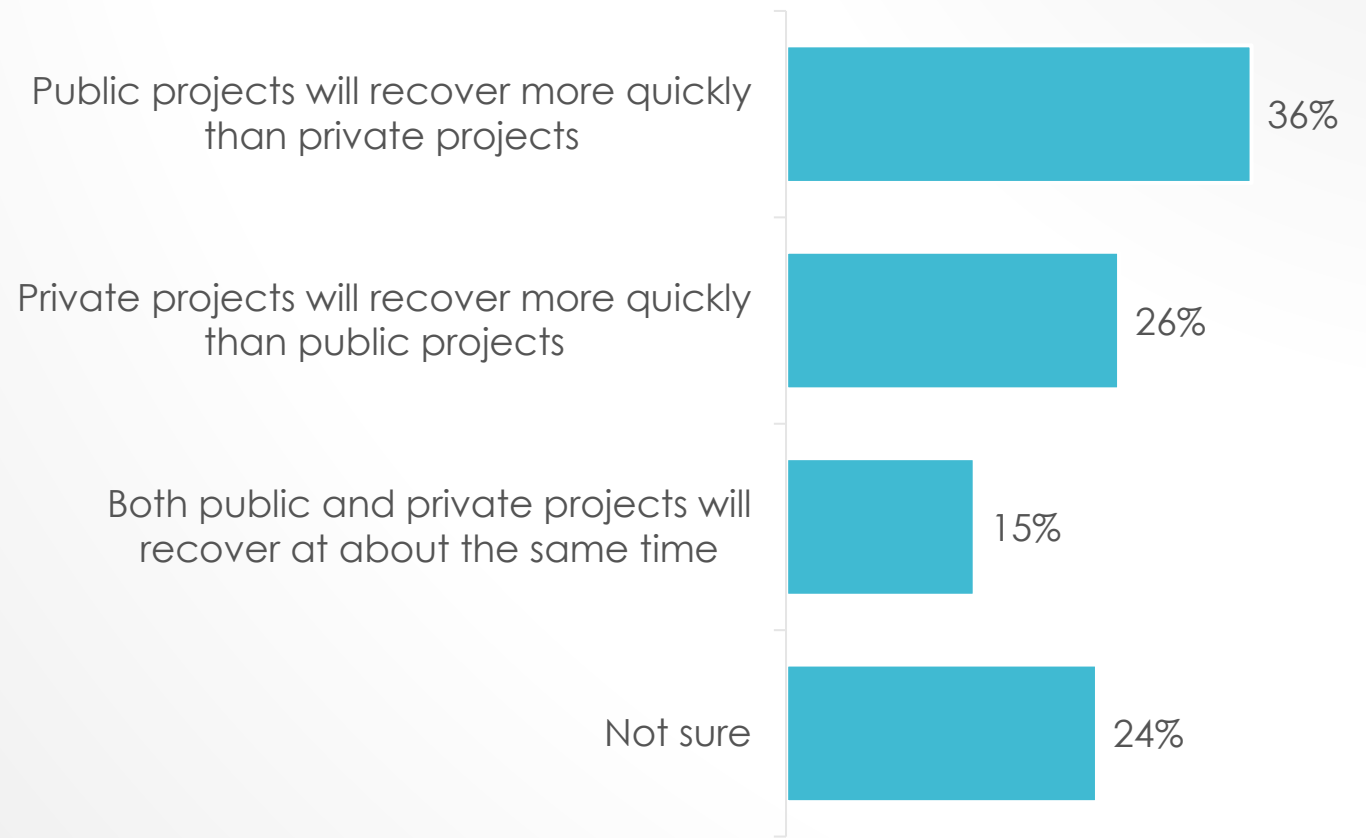
* Not asked prior to Wave 5

Q15. Are there any areas of your business where you are outperforming (as opposed to seeing declines or holding steady)?
Wave 5 - n = 503, Wave 6 - n = 485 , Wave 7 - n = 528

ALTHOUGH A PLURALITY OF FIRMS (36%) FEEL PUBLIC PROJECTS WILL RECOVER MORE QUICKLY THAN PRIVATE PROJECTS, OPINIONS ARE SPLIT AND NEARLY ONE-FOURTH (24%) ARE NOT SURE.

- Firms with more than 500 FTEs are more likely to feel public projects will recover more quickly than private projects (55%).

Perception of Public Versus Private Project Recovery*



* Not asked in previous waves.

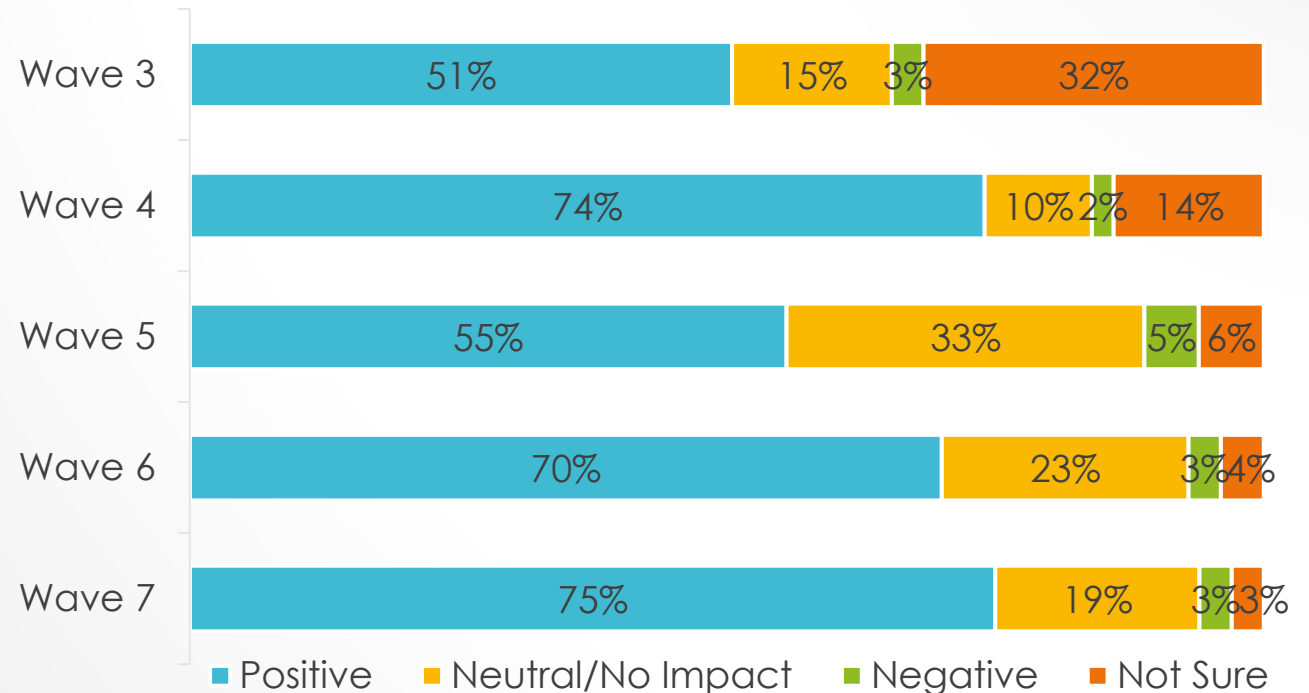
Q16. Thinking about public projects versus private projects, which of the following best describes your feelings?
Wave 7 - n = 530

IMPACT OF FEDERAL STIMULUS PROGRAM

PERCEPTIONS OF THE CARES ACT ARE AT THEIR HIGHEST LEVEL SINCE THE QUESTION WAS ASKED IN THE SURVEY. THREE-FOURTHS (75%) OF FIRMS RATE IT POSITIVELY.

- In Waves 3 and 4, the question was asked slightly differently. It asked what impact the stimulus package “will have” as opposed to “has had” since the bill had not yet taken affect.
- Details of differences by firm size are on the following slide.

Impact of Federal Stimulus Package on Firm*

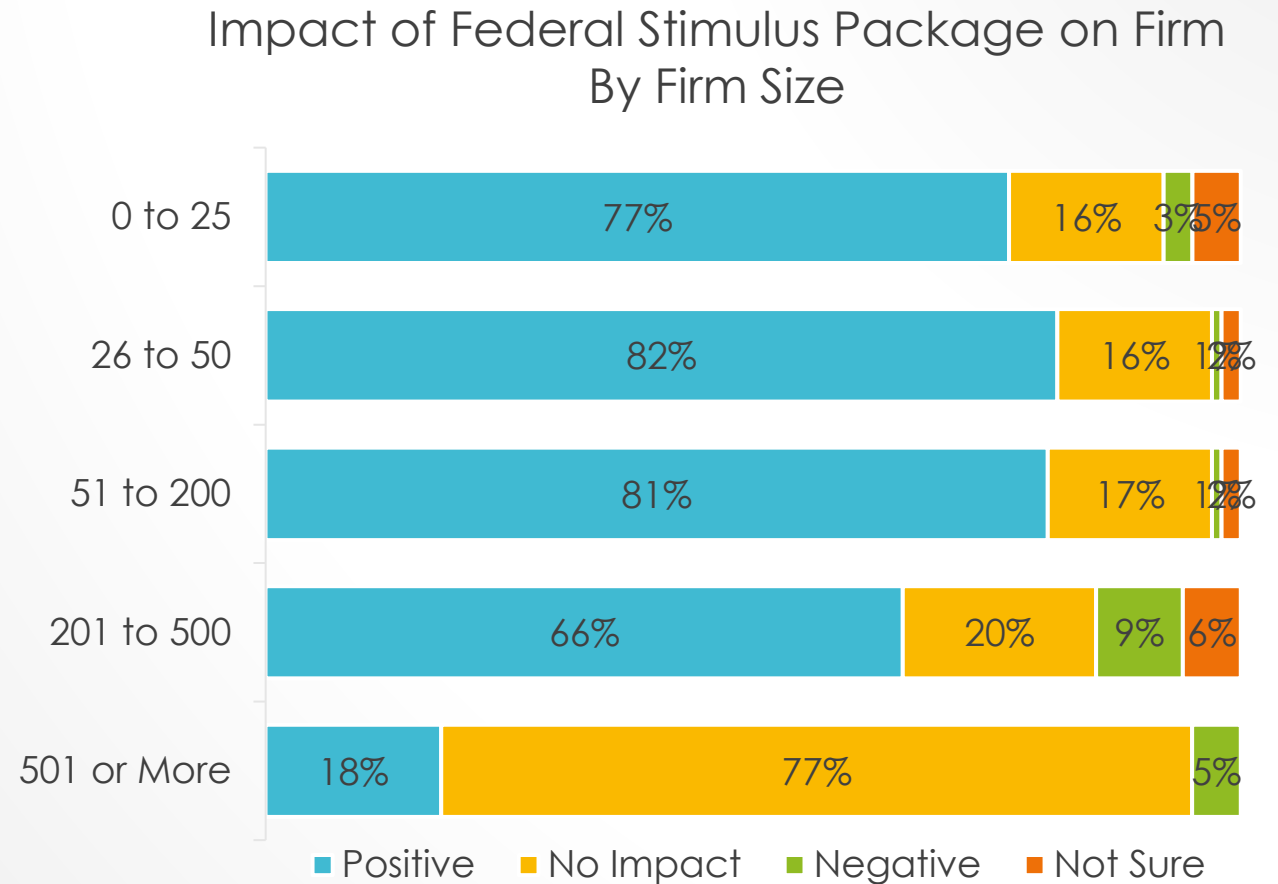


* Not asked in Waves 1 and 2

Q5. How has the U.S. Government's coronavirus stimulus package (CARES Act) signed into law on March 27, 2020 affected your firm, if at all? Has the impact been...?
 Wave 3 - n = 598, Wave 4 - n = 560, Wave 5 - n = 506, Wave 6 - n = 491, , Wave 7 - n = 537

POSITIVE PERCEPTIONS OF THE CARES ACT ARE HIGHEST AMONG FIRMS WITH UP TO 200 FTES, AFTER WHICH POSITIVE PERCEPTIONS DECLINE.

- Firms with more than 500 FTEs are *much less likely* to say the stimulus package has had a positive impact (18%) and *more likely* to say it has had no impact (77%), probably due to the focus of the package being on smaller businesses.

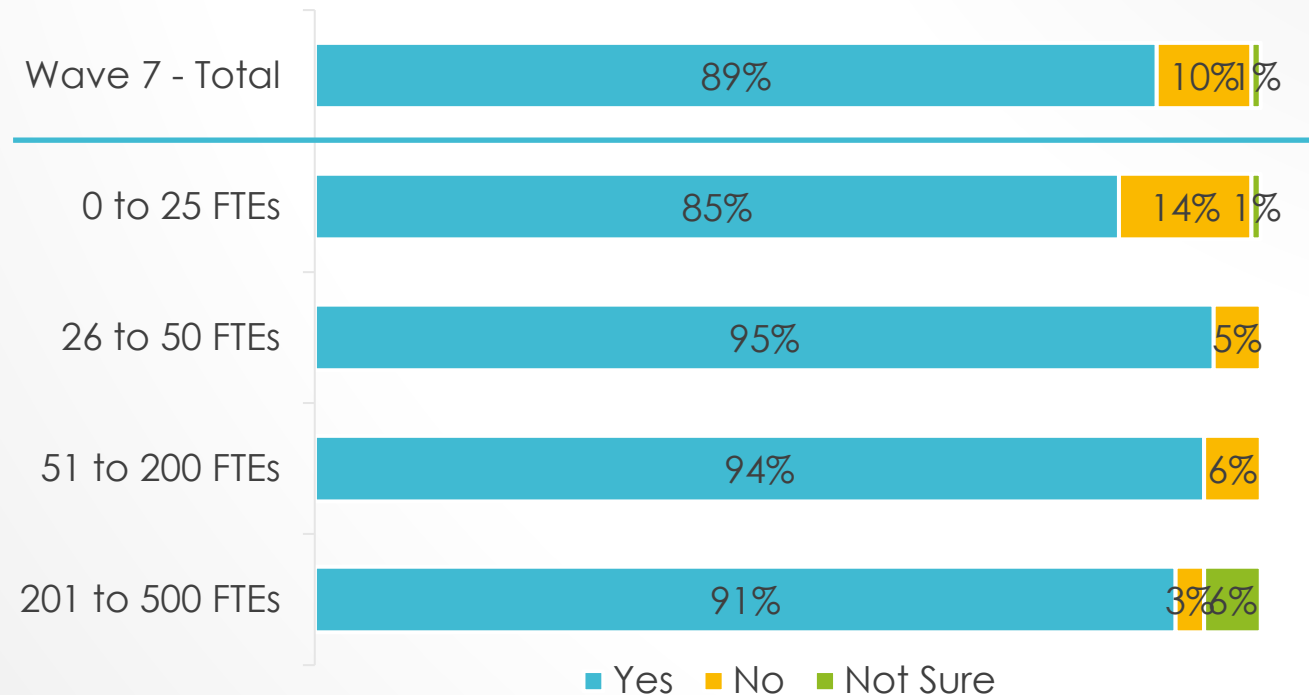


Q5. How has the U.S. Government's coronavirus stimulus package (CARES Act) signed into law on March 27, 2020 affected your firm, if at all? Has the impact been...?
Wave 7 - n = 537

NEARLY NINE OUT OF TEN FIRMS (89%) WITH 500 OR FEWER FTE APPLIED AND RECEIVED APPROVAL FOR A PPP LOAN.

- Firms with 25 or fewer FTE are less likely than other firms to have received a PPP loan.

Incidence of Receiving Approval for PPP Loan
- Among Firms with 500 or fewer FTE -

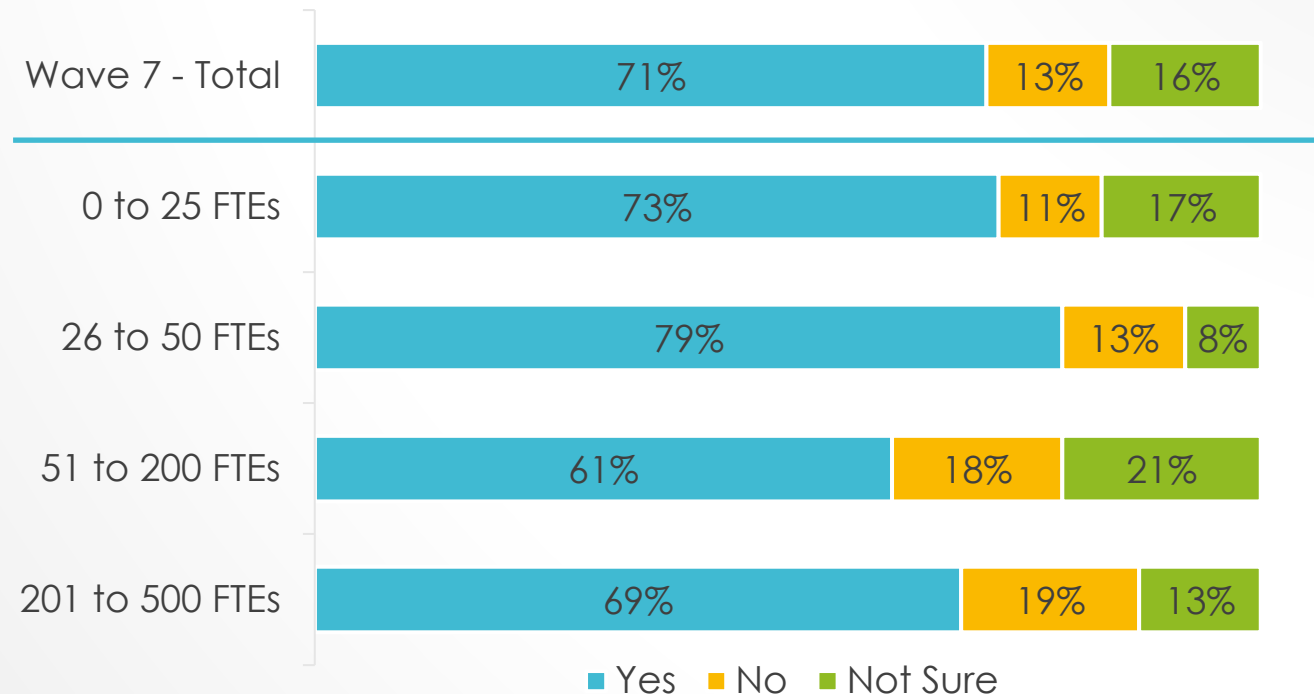


Q6. Did your firm apply and receive approval for a loan through the Paycheck Protection Program (PPP) authorized by Congress as part of the CARES Act?
Wave 7 - n = 510

ALTHOUGH MOST FIRMS (71%) FEEL THEY WILL BE ABLE TO USE THE PPP LOAN WITHIN THE EIGHT WEEK “FORGIVENESS” WINDOW, NEARLY THREE OUT OF TEN (29%) SAY THEY WILL NOT BE ABLE TO OR ARE NOT SURE.

- Firms with 51 or more FTE are less likely than smaller firms to feel they can use the loan within the eight week window.

Expectation of Using PPP Loan in Eight Weeks
- Among Firms With PPP Loan -

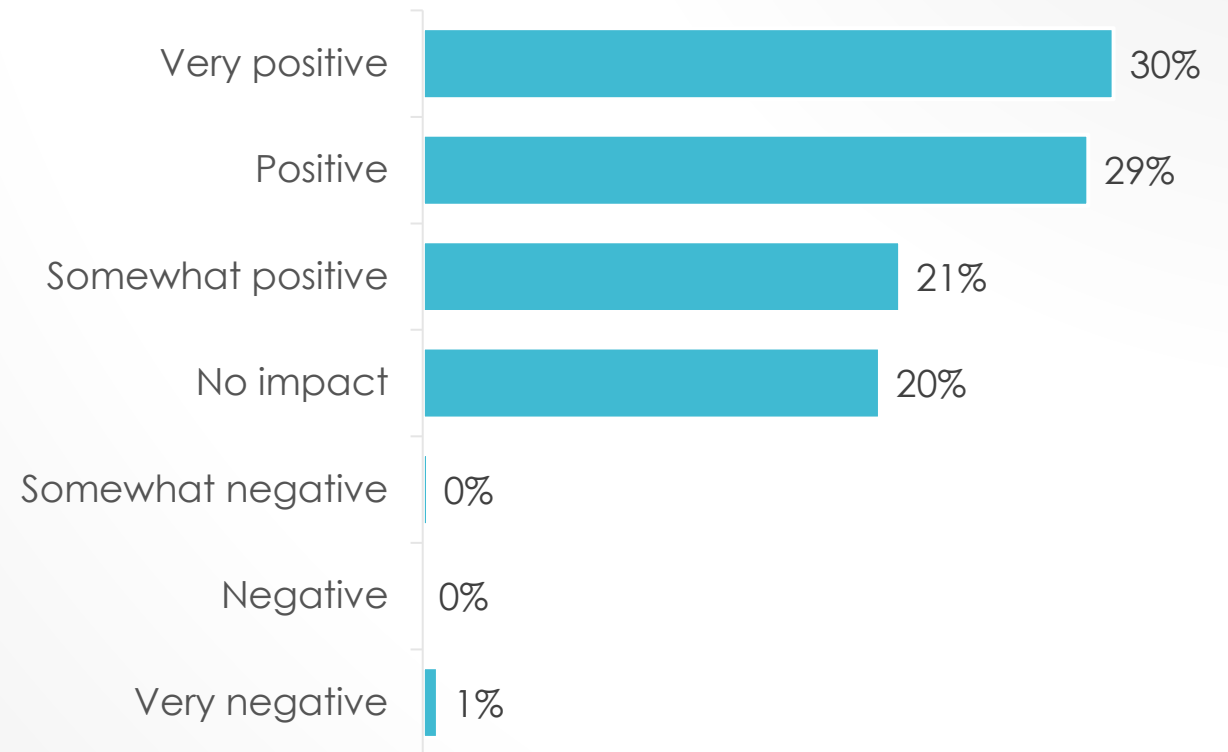


Q7. Has your firm been able, or will your firm be able, to use its PPP loan on eligible expenses within the eight-week period in order to be eligible for full loan forgiveness?
Wave 7 - n = 455

NEARLY EIGHT OUT OF TEN FIRMS (79%) SAY EXTENDING THE PPP LOAN FORGIVENESS WINDOW FROM EIGHT WEEKS TO 16 OR 24 WEEKS WOULD HAVE A POSITIVE IMPACT ON THEIR FIRM.

- There are no statistically significant differences by firm size.

Impact of Extending PPP Forgiveness Window
- Among Firms With PPP Loan -



Q8. Congress is considering increasing the amount of time companies can use their PPP loan from eight weeks to sixteen or twenty-four weeks in order to be eligible for loan forgiveness. What impact, if any, would this have on your firm?

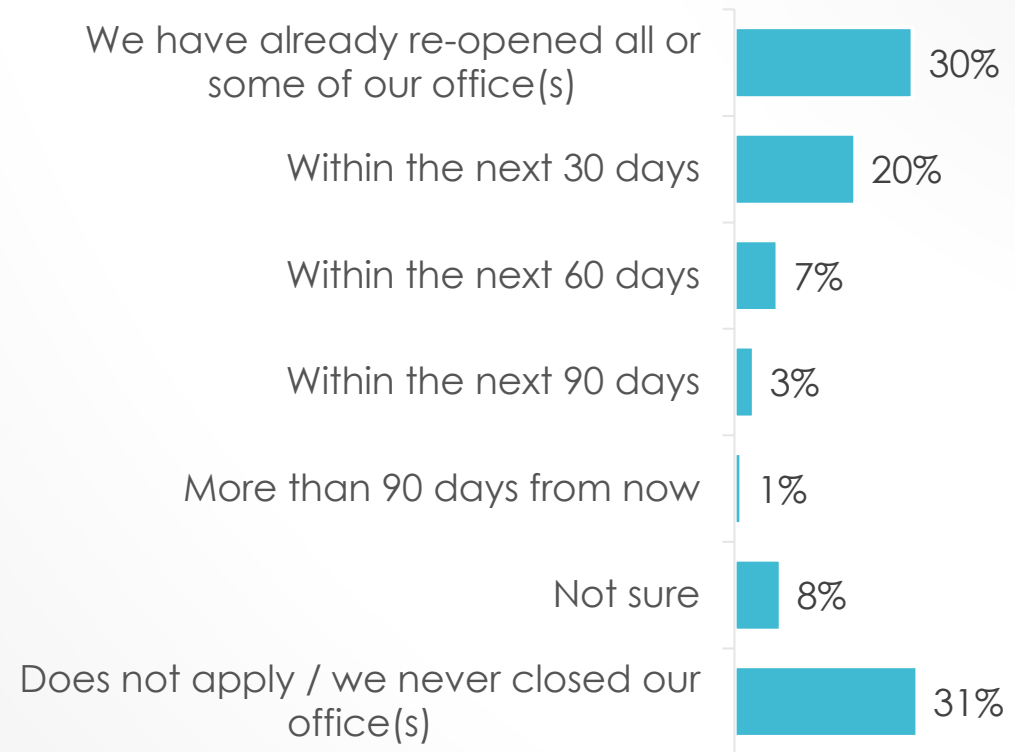
Wave 7 - n = 455

PLANS TO RE-OPEN OFFICES

A MAJORITY OF FIRMS (61%) HAVE EITHER ALREADY RE-OPENED OR NEVER CLOSED. MOST OF THE REST PLAN TO RE-OPEN IN THE NEXT 30 TO 90 DAYS (27%).

- Smaller firms are more likely to have never closed or already re-opened compared to larger firms.
 - 0 to 25 FTEs = 69% “Never closed / already re-opened”
 - 26 to 50 FTEs = 58%
 - 51 to 200 FTEs = 54%
 - 201 to 500 FTEs = 46%
 - 501 or more FTEs = 32%
- Nonetheless, nearly all firms will re-open their offices in the next 30 to 60 days.

When Firms Plan to Re-open Offices



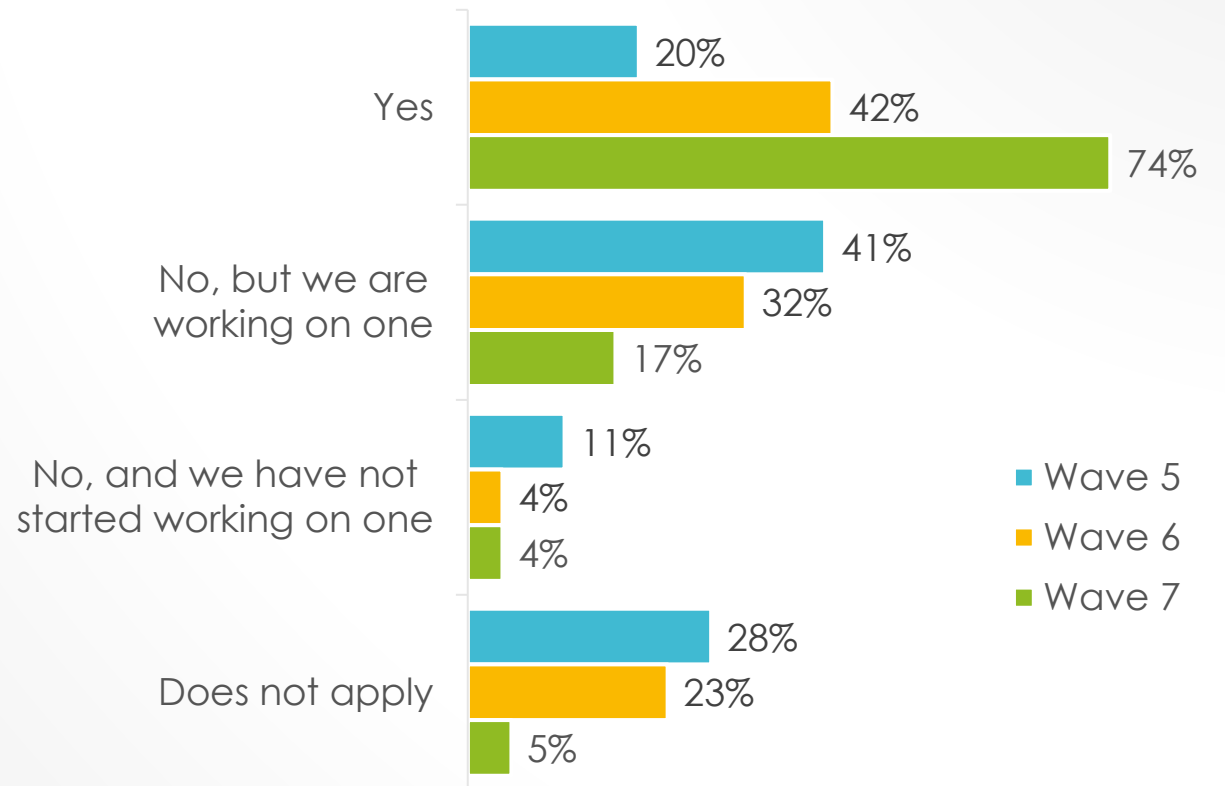
Q10. Which of the following best describes when you will begin to re-open your firm's offices?
Wave 7 - n = 529

THE NUMBER OF FIRMS THAT HAVE CREATED A PLAN FOR ENSURING THE SAFETY OF STAFF CONTINUES TO CLIMB. THE PERCENTAGE HAS GROWN FROM 20% IN WAVE 5 TO 74% IN WAVE 7.

- After removing firms for whom this question does not apply, firms with more than 25 FTEs are slightly more likely to either have a plan or to be working on one.
 - 0 to 25 FTEs = 92% “Have or working on one”
 - 26 to 50 FTEs = 98%
 - 51 to 200 FTEs = 99%
 - 201 to 500 FTEs = 100%
 - 501 or more FTEs = 100%

* Not asked prior to Wave 5.

Have Plan to Ensure the Safety of Staff in Office*



Q11. Has your firm developed a plan for its office(s) to ensure the safety of the staff?

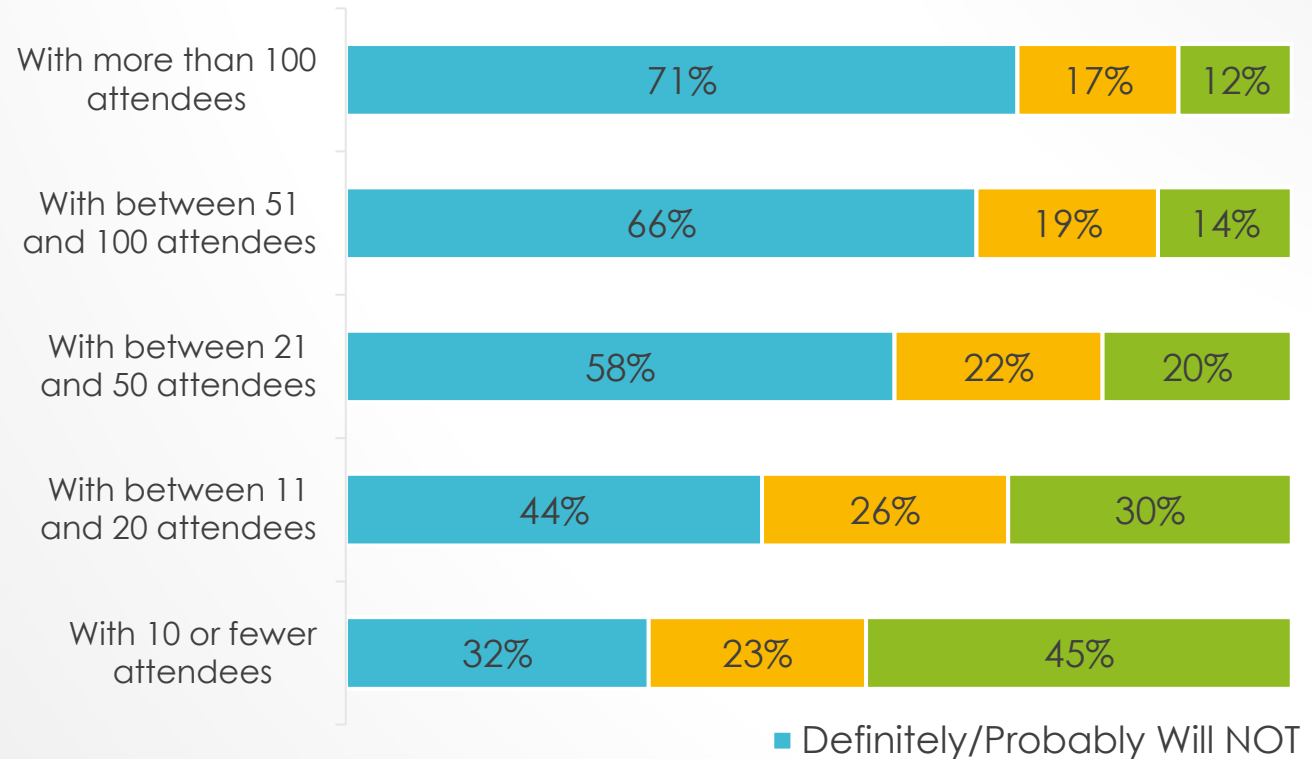
Wave 5 - n = 503, Wave 6 - n = 490, Wave 7 - n = 530

LIKELIHOOD OF TRAVELING

VERY FEW FIRMS INDICATE THEY ARE LIKELY TO ALLOW AIR TRAVEL TO CONFERENCES / MEETINGS / EVENTS WITH MORE THAN 50 ATTENDEES. THE EVENT WILL NEED TO HAVE 10 OR FEWER ATTENDEES TO ATTRACT A PLURALITY OF FIRMS (45%).

- There are no meaningful, statistically significant differences by firm size.

Likelihood of Allowing Air Travel in Next Six Months to Conferences / Meetings / Events

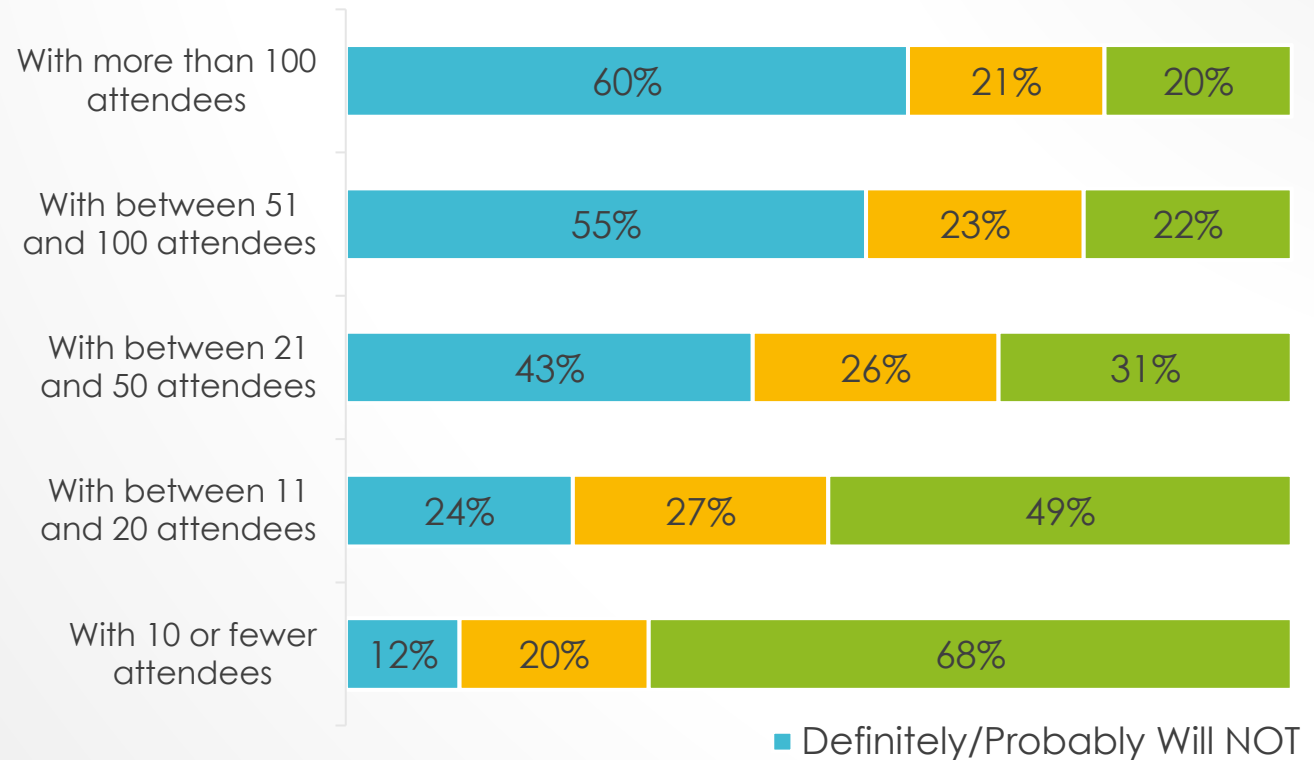


Q12. How likely is your firm to allow the following types of air travel in the next six months?
Wave 7 - n = 513 - 517

FIRMS ARE MUCH MORE LIKELY TO ALLOW TRAVEL BY CAR TO CONFERENCES / MEETINGS / EVENTS COMPARED TO AIR TRAVEL. HOWEVER, THE EVENT WILL NEED TO HAVE 20 OR FEWER ATTENDEES TO ATTRACT HALF OF FIRMS.

Likelihood of Allowing Car Travel in Next Six Months to Conferences / Meetings / Events

- There are no meaningful, statistically significant differences by firm size.

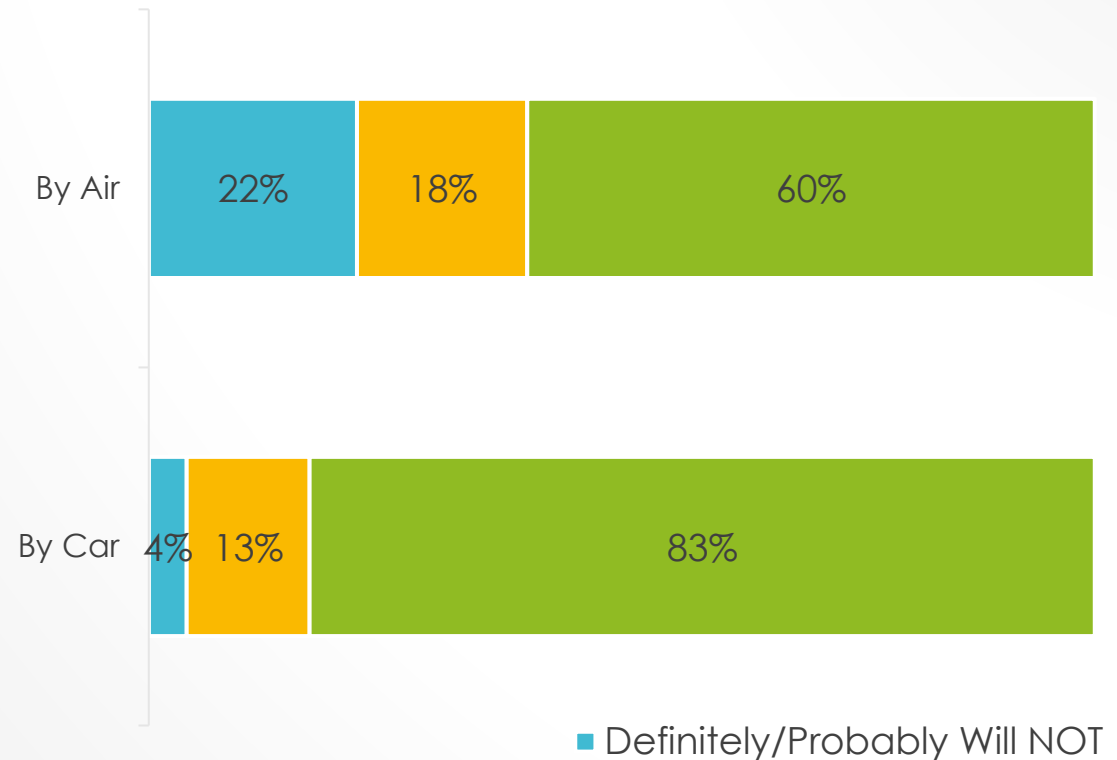


Q13. How likely is your firm to allow the following types of travel by car in the next six months?
Wave 7 - n = 511 - 518

ALTHOUGH MORE THAN HALF OF FIRMS (60%) ARE LIKELY TO ALLOW AIR TRAVEL TO IN-PERSON CLIENT MEETINGS IN THE NEXT SIX MONTHS, ALLOWING TRAVEL BY CAR IS EVEN MORE LIKELY (83%).

Likelihood of Allowing Travel in Next Six Months to In-Person Client Meetings

- Although there are no statistically significant differences by firm size when allowing travel by car to in-person client meetings, there are differences when considering air travel. Smaller firms are less likely to allow air travel to client meetings than larger firms:
 - 0 to 25 FTEs = 54%
“Definitely/Probably Will
 - 26 to 50 FTEs = 58%
 - 51 to 200 FTEs = 66%
 - 201 to 500 FTEs = 77%
 - 501 or more FTEs = 77%



Q12/13. How likely is your firm to allow the following types of air travel / travel by car in the next six months?
Wave 7 - n = 516 - 519

APPENDIX

TESTS OF SIGNIFICANCE FOR MEANS

F-test

When the mean is displayed for a row variable, MarketSight first runs an Analysis of Variance (ANOVA) using an F-test. Doing so tests the hypothesis that the means of multiple normally distributed populations, all having the same variance, are equal.

MarketSight tests whether or not the row variable's means are equal to one another for all columns in the crosstab. Rejecting the test hypothesis implies that at least one of the column means is significantly different from the others.

Fisher's Least Significant Difference (LSD) test

If the statistics option to "Correct for Type I errors in all comparisons" is disabled, MarketSight will run Fisher's LSD test for both Pairwise tests and Contrast tests of means. MarketSight only runs Fisher's LSD test if the ANOVA F-test first rejects the null hypothesis that all column means are equal to one another.

Fisher's LSD test is a relatively powerful test because it uses the pooled variance estimate from the F-test, thus taking advantage of the increased sample size of all columns in the crosstab. Pooling the variance is valid because MarketSight explicitly tests for equality of variance among all columns prior to running the associated F-test.

Although the test is more powerful than either the Tukey HSD or Scheffé tests, it is more susceptible to Type I error when running multiple simultaneous tests.

TESTS OF SIGNIFICANCE FOR MEANS (CONT'D)

Scheffé test

If the statistics option to "Correct for Type I errors in all comparisons" is enabled, MarketSight will run the Scheffé test for Contrast tests of means. MarketSight only runs the Scheffé test if the ANOVA F-test first rejects the null hypothesis that all column means are equal to one another.

The Scheffé test is a conservative test for running multiple Contrast tests of Means which controls the overall Type I error rate for all possible contrasts based on the selected Confidence Level.

Tukey-Kramer tests

MarketSight will run Tukey-Kramer test for Pairwise tests of means. MarketSight only runs Tukey-Kramer test if the ANOVA F-test first rejects the null hypothesis that all column means are equal to one another.

Tukey-Kramer test is a conservative test for running multiple Pairwise comparisons of Means. It controls the overall Type I error rate across a number of related Pairwise tests based on the selected Confidence Level.

TESTS OF SIGNIFICANCE FOR PROPORTIONS

Chi-squared

When a Row Variable displays the Column % or Count option for individual Values, MarketSight runs a Chi-squared test. This test examines whether there is a relationship between the Column Variable(s) and the Row Variable.

Chi-squared tests involve a comparison of "actual" cell counts to "expected" cell counts in a crosstab.

The expected count for each cell is derived from a Row Variable's actual counts as follows: multiply the cell's row total by its column total, then divide by the sum total of all observations.

If the actual cell counts for one or more cells differ materially from their expected counts, the Chi-squared test may produce a statistically significant result which implies there is a relationship between the Column Variable(s) and the Row Variable.

A modified version of a Chi-Squared test is run for Multiple Response Variables.

TESTS OF SIGNIFICANCE FOR PROPORTIONS (CONT'D)

Fisher's Exact

For 2x2 crosstabs with small sample sizes, the Chi-squared test may be unreliable. Therefore, MarketSight runs an alternate test, Fisher's Exact Test, if more than 20% of the cells in a 2x2 crosstab have an expected cell count less than 5, or if any cells in a 2x2 cross-tab have an expected cell count less than 1.

Fisher's Exact Test calculates the true probability of observing a particular set of actual cell counts in a 2 x 2 crosstab, assuming that row and column totals are held constant.

Fisher's Exact Test is not run for Multiple Response Variables.

z-test

MarketSight runs Z-tests for both Contrast and Pairwise tests of Column Proportions. A Z-test is used to test for a difference between two column proportions. The column proportions involved in the test are the cell counts divided by their respective column totals.

A Z-test is only run when the cells being compared have actual counts greater or equal to 5 and the column sample size minus the actual cell counts is greater than or equal to 5. If these data sufficiency conditions are not met, MarketSight runs Fisher's Exact Test instead.

A modified version of a Z-test is run for Multiple Response Variables.

METHODOLOGY – WAVE 1

- The Institute for Association and Nonprofit Research (IFANR) invited individuals from among the database list of member companies provided by the American Council of Engineering Companies (ACEC) to participate in this survey. One invitation was sent per member company.
 - Data collection occurred on March 17 and 18, 2020.
 - A total of 3,456 invitations were emailed, although 294 bounced and 17 opted-out, resulting in a total of 3,145 potential respondents.
 - Individuals who did not respond to the first email were sent one follow-up reminder.
 - In all, 794 individuals responded to the email invitations for an overall **response rate of 25%**.
- Individuals could respond using a laptop/desktop computer, tablet or smartphone; 12% of respondents completed the survey using a mobile device.
- Throughout the report for Wave 1 meaningful, statistically significant differences are noted by geographic region.

METHODOLOGY – WAVE 2

- The Institute for Association and Nonprofit Research (IFANR) invited individuals from among the database list of member companies provided by the American Council of Engineering Companies (ACEC) to participate in this survey. One invitation was sent per member company.
 - Data collection occurred on March 24 and 25, 2020.
 - A total of 3,438 invitations were emailed, although 298 bounced and 20 opted-out, resulting in a total of 3,120 potential respondents.
 - Individuals who did not respond to the first email were sent one follow-up reminder.
 - In all, 738 individuals responded to the email invitations for an overall **response rate of 24%**.
- Individuals could respond using a laptop/desktop computer, tablet or smartphone; 11% of respondents completed the survey using a mobile device.
- Throughout this report meaningful, statistically significant differences are noted by number of FTEs.

METHODOLOGY – WAVE 3

- The Institute for Association and Nonprofit Research (IFANR) invited individuals from among the database list of member companies provided by the American Council of Engineering Companies (ACEC) to participate in this survey. One invitation was sent per member company.
 - Data collection occurred on March 31 and April 1, 2020.
 - A total of 3,417 invitations were emailed, although 298 bounced and 9 opted-out, resulting in a total of 3,110 potential respondents.
 - Individuals who did not respond to the first email were sent one follow-up reminder.
 - In all, 610 individuals responded to the email invitations for an overall **response rate of 20%**.
- Individuals could respond using a laptop/desktop computer, tablet or smartphone; 10% of respondents completed the survey using a mobile device.
- Throughout this report meaningful, statistically significant differences are noted by number of FTEs.

METHODOLOGY – WAVE 4

- The Institute for Association and Nonprofit Research (IFANR) invited individuals from among the database list of member companies provided by the American Council of Engineering Companies (ACEC) to participate in this survey. One invitation was sent per member company.
 - Data collection occurred on April 7 and 8, 2020.
 - A total of 3,407 invitations were emailed, although 291 bounced and 9 opted-out, resulting in a total of 3,107 potential respondents.
 - Individuals who did not respond to the first email were sent one follow-up reminder.
 - In all, 566 individuals responded to the email invitations for an overall **response rate of 18%**.
- Individuals could respond using a laptop/desktop computer, tablet or smartphone; 10% of respondents completed the survey using a mobile device.
- Throughout this report meaningful, statistically significant differences are noted by number of FTEs.

METHODOLOGY – WAVE 5

- The Institute for Association and Nonprofit Research (IFANR) invited individuals from among the database list of member companies provided by the American Council of Engineering Companies (ACEC) to participate in this survey. One invitation was sent per member company.
 - Data collection occurred on April 21 and 22, 2020.
 - A total of 3,395 invitations were emailed, although 301 bounced and 11 opted-out, resulting in a total of 3,083 potential respondents.
 - Individuals who did not respond to the first email were sent one follow-up reminder.
 - In all, 512 individuals responded to the email invitations for an overall **response rate of 17%**.
- Individuals could respond using a laptop/desktop computer, tablet or smartphone; 9% of respondents completed the survey using a mobile device.
- Throughout this report meaningful, statistically significant differences are noted by number of FTEs.

METHODOLOGY – WAVE 6

- The Institute for Association and Nonprofit Research (IFANR) invited individuals from among the database list of member companies provided by the American Council of Engineering Companies (ACEC) to participate in this survey. One invitation was sent per member company.
 - Data collection occurred on May 5 and 6, 2020.
 - A total of 3,384 invitations were emailed, although 305 bounced and 8 opted-out, resulting in a total of 3,071 potential respondents.
 - Individuals who did not respond to the first email were sent one follow-up reminder.
 - In all, 492 individuals responded to the email invitations for an overall **response rate of 16%**.
- Individuals could respond using a laptop/desktop computer, tablet or smartphone; 10% of respondents completed the survey using a mobile device.
- Throughout this report meaningful, statistically significant differences are noted by number of FTEs.

METHODOLOGY – WAVE 7

- The Institute for Association and Nonprofit Research (IFANR) invited individuals from among the database list of member companies provided by the American Council of Engineering Companies (ACEC) to participate in this survey. One invitation was sent per member company.
 - Data collection occurred between May 27 and 29, 2020.
 - A total of 3,376 invitations were emailed, although 311 bounced and 8 opted-out, resulting in a total of 3,057 potential respondents.
 - Individuals who did not respond to the first email were sent a follow-up reminder. Those who did not respond to the reminder email were sent a second reminder email.
 - In all, 538 individuals responded to the email invitations for an overall **response rate of 18%**.
- Individuals could respond using a laptop/desktop computer, tablet or smartphone; 8% of respondents completed the survey using a mobile device.
- Throughout this report meaningful, statistically significant differences are noted by number of FTEs.

STATISTICAL NOTES

- Statistically significant differences are evaluated at a 95% confidence interval (for a description of tests used, please see the Appendix).
- There is no margin of sampling error as this was a census of all individuals in the ACEC database.
- Although every effort was taken to minimize survey bias, there is no way to completely eliminate all sources of potential bias. Sources of potential bias include, but are not limited to, the following:
 - Non-response bias
 - Confounding bias
 - Question wording bias
 - Question order bias
 - Habituation
 - Sponsor bias
 - Confirmation bias

THANK YOU



Research Conducted by
Joseph Bates
Research Consultant
ACEC Research Institute

Institute@acec.org

