

# **ELECTRICAL CONTRACTOR Media Group**

**April/March Panel Study:  
Effects of the Coronavirus on Panelist Businesses**

**6/2/2020**



Susan H. Metzger  
Director of Research  
smetzger@renaiss.com

6-2-20

To: Andrea Klee

### **April/March Panel Study: Effects of the Coronavirus on Panelist Businesses**

The Coronavirus pandemic served as the theme for both the March and April Panel surveys. The March survey was in the field from March 26 through April 12 during which time, 248 Panelists completed the survey. A second, follow-up survey that included all of the March questions plus a few additional questions was conducted from April 24 through May 13, 2020. 218 Panelists completed the second survey.

The survey covered current conditions on the ground, specifically whether firm is open for business, disruptions experienced among firms open for business as well as the work the firm is accepting/performing, issues with supply chain shortages, if any, and steps being considered to deal with the shortages. The survey also covered economic expectations for the future, both near term and over the next few years.

These questions were added in April: Greatest challenges as a result of the pandemic, whether the firm applied for financial relief under the CARES Act and their experience with the CARES Act, whether the pandemic brought up any legal issues, the extent of the financial hit suffered and, for firms that were closed, whether they had a restart plan.

The results are reported comparing March to April among the total sample, by number of employees (1-9 vs. 10+) and by state groupings ("A" vs. "B"): Group A is composed of New York, New Jersey, Pennsylvania, Massachusetts Florida, Louisiana, Illinois, Michigan, California, Oregon and Washington. These are the states that had the highest number of reported cases as of mid to late March. Group B is all of the remaining states plus DC and Puerto Rico.

In addition, there were 121 Panelists who completed both the March and April surveys, allowing us to conduct a true Pre-Post test on their responses.

The Subscriber Research Panel is made up of electrical contractors who subscribe to ELECTRICAL CONTRACTOR and/or to one of its newsletters and who are recruited in advance to participate in monthly research studies. When this study was fielded, the Panel had about 1680 members.

19 West 34<sup>th</sup> Street, PH  
279 Harry Wells Road

New York, NY 10001-3006  
Saugerties NY 12477-3851

(212) 319-1833  
(845) 246-1833

## Overview

As we noted in March, the electrical contractors that participated in this survey view the pandemic more in terms of disruptions than disaster. The comparison between the March and April surveys show relatively few differences including a few areas of deterioration but also some areas of improvement.

- In April, 80% confirm that their firm is open for business, up significantly from 71% in March. In April, another 5% selected “something else”, down significantly from March. However, the sum of open for business and “something else” is statistically unchanged between March and April.
- While 75% of firms that are open said that some projects were postponed, a far smaller percent --33%-- reported cancelled projects.
  - There is only one statistically significant difference among the total sample in April compared with March (more firms report a limit on the number of employees that can be sent to a job-site) and very few statistically significant differences by subgroups (1-9 vs. 10+ employees or “A” states vs. “B” states).
- In response to supply chain difficulties, 13% are currently looking for a secondary supplier, up significantly from 8% in March. This increase is driven by firms with 1-9 employees, perhaps because they don’t enjoy the same access to material as larger firms.
- Panelists were also asked about the scenarios under which they are being asked to work. Compared with March, four of the scenarios increased **significantly**, suggesting that opportunities appear to have *expanded* rather than contracted. None declined. These all increased among the total sample:
  - We are being asked to work in occupied businesses
  - We are being asked to send crews to do outdoor work
  - We are being asked to work in occupied residences
  - We are being asked to work on new emergency hospitals or other healthcare facilities that are being created to address the coronavirus pandemic
- None of this is to say that electrical contractors were not thrown a curve ball. As they see it, their greatest challenges fall into the categories of health and safety, performing work in a safe manner via social distancing, use of PPEs and cleaning and disinfecting; logistics including limited/delayed access to materials, complainance with restrictions/rules, scheduling and working remotely; personnel issues including both getting people back to work and employee fears and morale; financial issues including finding work, cash flow/finances, cancelled/delayed jobs, customers are struggling financially, payroll, staying in business/planning for the future, estimates/bids.
- In April, 48% of all who were surveyed expect there to be backlog of work once the pandemic is over. This is a significant decline from March, when it was 57%. However, most of the 9 point shift came from “too soon to tell”, rather than “no” backlog. In fact, only 13% say that they do not expect a backlog.

- Both short-term confidence (next few months) and longer term confidence (next few years) hovers around “somewhat” confident. There were no statistically significant differences in the percentages that said that they were extremely, very or somewhat confident comparing March to April, in terms of short-term or long-term confidence.

This is what we learned from the other new questions that were added in April.

- Only about four in ten have attempted to make use of the Coronavirus Aid, Relief and Economic Security (CARES) Act: (36% already applied and 6 % plan to do so). Based on volunteered comments, for those who did apply, there were at least as many negative outcomes as positive.
  - Further, the negative comments themselves, shown in the Appendix, reflect a fair degree of anger at the cumbersome or confusing process, that smaller businesses may be at a disadvantage and what some see as abuses by some employees (staying home when there is work to be done).
- Only 7% report any legal issues such as dealing with cancelled contracts or force majeure issues.
- Panelists in April reported that business was off an average of 40% since the start of the pandemic. This average was higher in Group A states, where the pandemic struck earlier (45% compared with an average of 36% in group B states) and among smaller firms (46% among firms with 1-9 employees vs. 33% among firms with 10+ employees).

However, optional comments in the Appendix continue to reflect a can-do attitude of perseverance rather than one of defeat or despondency, although we are seeing a higher level of frustration than in March. The negative and angry comments are particularly directed at the CARES Act, PPP and difficulties in obtaining unemployment insurance as well as the lockdown and the necessity for it in states where it more directly affects electrical contractors.

Another way of looking at the results is to focus on the 121 Panelists who participated in both March and April. This provides the purest test of changes over time. As with the total sample, there is a mix of positive and negative findings.

|    |   |   |
|----|---|---|
| Q1 | + | More say they're open for business                                    |
| Q2 | - | More say that projects were postponed                                 |
|    | - | More say they were limited by the number of employees they could send |
|    | + | Fewer say they were unable to get needed supplies                     |
| Q5 | + | More say they're doing MSR in closed premises                         |
|    | + | More say they're sending crews for outdoor work                       |
|    | + | More say they're working on emergency facilities                      |
|    | + | More say they're working on planned new construction                  |
|    | + | More say they're working on occupied residences                       |
|    | + | More say they're working on occupied businesses                       |
|    | - | Fewer say they expect a backlog of work                               |

## Detailed Findings

Rather than assume that we knew the conditions on the ground, the survey began this way:

The publisher and editors wanted to check in with you at this unprecedented time to send their best wishes and also to find out what conditions are like for you on the ground as a result of the coronavirus pandemic. The news reports have been overwhelmingly negative, but we don't want to assume that this is the case with you, so we want to know, what effect, if any has the coronavirus pandemic had on your business in the past few weeks? First of all, is your firm open for business/are you able to send employees to job-sites?

In April, 80% confirm that their firm is open for business, up significantly from 71% in March. In April, another 5% selected "something else", down significantly from March. However, the sum of open for business and "something else" is statistically unchanged between March and April. Those saying "something else" explained that they are open for emergencies, service and repair, "not all jobs", essentially the same explanations that we heard in March.

### Q1. First of all, is your firm open for business/are you able to send employees to job-sites?

|                | Total         |               | Number of Employees |       |               |               | Large Number of Early Cases |               |              |       |
|----------------|---------------|---------------|---------------------|-------|---------------|---------------|-----------------------------|---------------|--------------|-------|
|                |               |               | 1 - 9 Employees     |       | 10+ Employees |               | Group A (Yes)               |               | Group B (No) |       |
|                | March         | April         | March               | April | March         | April         | March                       | April         | March        | April |
|                | (248)         | (218)         | (153)               | (125) | (95)          | (92)          | (124)                       | (103)         | (124)        | (115) |
|                | %             | %             | %                   | %     | %             | %             | %                           | %             | %            | %     |
| Yes            | 71            | <b>&lt;80</b> |                     |       | 79            | <b>&lt;90</b> | 60                          | <b>&lt;75</b> |              |       |
| No             | 19            | 15            |                     |       |               |               |                             |               |              |       |
| Something Else | <b>10&gt;</b> | 5             |                     |       |               |               | <b>13&gt;</b>               | 5             |              |       |

Empty Cells indicate no difference between pairs; the month that is significantly larger is bolded; the month that is significantly smaller is italicized. Testing is at the 90% level of confidence.

The next few questions drill down on the conditions experienced by firms that are still open for business, including those operating at less than full capacity.

Panelists whose firms are not closed report a number of disruptions, notably projects being postponed (75%) or cancelled (33%). About three in ten report a problem with sick employees or those unwilling to work, PPE shortages (7% report other shortages) and/or that financing is tightening. About 15% cited each of the newly added issues: infected job sites or a shortage of government workers to conduct inspections, to process paperwork or to award contracts. However, 10% said that they experienced none of these disruptions.

As shown on the table, there is only one statistically significant difference among the total sample in April compared with March (a limit on the number of employees that can be sent to a job-site) and very few statistically significant differences by subgroups:

- In April, those in Group B states were more likely than in March to say that projects were postponed (75% vs. 60%). This may be because the coronavirus was later in arriving in those states than in Group A states.
- Those in firms with 10+ employees (but not by any other subgroups) are more likely in April than in March to say that projects have been cancelled (36% vs. 24%).
- Those in firms with 10+ employees and those in both Group A states **as well as** in Group B states are more likely in April than they were in March to say that they are limited by the number of employees that they can send to a job-site. Smaller firms may not have reported this because they probably fall below the employee size cut-off.

**Q2. Even if your firm is open for business, which of the following, if any, has your firm experienced? (Please select all that apply.)**

|  | Total |       | Number of Employees |       |               |       | Large Number of Early Cases |       |              |       |
|--|-------|-------|---------------------|-------|---------------|-------|-----------------------------|-------|--------------|-------|
|  |       |       | 1 - 9 Employees     |       | 10+ Employees |       | Group A (Yes)               |       | Group B (No) |       |
|  | March | April | March               | April | March         | April | March                       | April | March        | April |
| Base: firm is open   | (201) | (185) | (116)               | (96)  | (85)          | (88)  | (90)                        | (82)  | (111)        | (103) |
|  | %     | %     | %                   | %     | %             | %     | %                           | %     | %            | %     |
| Projects were postponed  | 67    | 75    |                     |       |               |       |                             |       | 60           | <75   |
| Workers called in sick or are unwilling to go to a job site                                | 31    | 30    |                     |       |               |       |                             |       |              |       |
| Projects were cancelled  | 27    | 33    |                     |       | 24            | <36   |                             |       |              |       |
| We are unable to get specific PPE supplies (such as face masks or gloves)                  | 26    | 29    |                     |       |               |       |                             |       |              |       |
| We are limited by the number of employees that we can send to a job site                   | 19    | <31   |                     |       | 25            | <43   | 26                          | <40   | 14           | <24   |
| Financing is tightening  | 22    | 27    |                     |       |               |       |                             |       |              |       |
| Shortage of gov't workers (to issue permits, C of Os, issue permits or to award contracts) | NA    | 15    |                     |       |               |       |                             |       |              |       |
| Issue with infected job sites  | NA    | 14    |                     |       |               |       |                             |       |              |       |
| We are unable to get a range of tools, equipment or supplies                               | 8     | 7     |                     |       |               |       |                             |       |              |       |
| We are under orders to "shelter in place"/ not considered an essential industry or trade.  | 6     | 7     |                     |       |               |       |                             |       |              |       |
| None of the above  | 14    | 10    |                     |       |               |       |                             |       |              |       |
| Other  | 9     | 5     |                     |       |               |       | 11 >                        | 4     |              |       |

**Empty Cells indicate no difference between pairs; the month that is significantly larger is bolded; the month that is significantly smaller is italicized. Testing is at the 90% level of confidence.**

Those who said that they were experiencing shortages were asked to enumerate what was in short supply and steps that they may be taking to address the shortages. Masks, hand sanitizers and gloves received the most mentions in April. This was also the case in March.

**Q3. Summary - Earlier you mentioned that your firm had trouble obtaining tools, materials or supplies. Please list up to 5 of the most important items that were unavailable at all or in sufficient quantities**

| <b>MENTIONS</b>     | <b>1st</b> | <b>2nd</b> | <b>3rd</b> | <b>4th</b> | <b>5th</b> | <b>TOTAL</b> |
|---------------------|------------|------------|------------|------------|------------|--------------|
| Masks               | 17         | 3          |            |            | 1          | 21           |
| Hand sanitizer      | 1          | 6          | 5          |            |            | 12           |
| Gloves              |            | 8          | 3          |            |            | 11           |
| PPE                 | 9          | 2          |            |            |            | 11           |
| Lighting/LED Lights | 5          | 1          |            | 2          |            | 8            |
| Wipes               | 1          | 1          | 3          | 3          |            | 8            |
| Breakers            | 1          | 1          |            | 1          | 1          | 4            |
| Sanitizer           |            |            | 2          | 1          |            | 3            |
| Switchgear          | 2          | 1          |            |            |            | 3            |
| Toilet paper        | 1          |            | 2          |            |            | 3            |

Cleaning supplies, Disinfectants, Fixtures, Gear, Materials 2 mentions each

Applicable parts, Delayed orders, Dimmers, Electrical panels, Face shields, Fire alarm equipment, Fittings, Lysol Spray, Paper towels, Pipe, Replacement parts, Respirators, Security alarm equipment, Specialty items, Wait time for materials, Work truck components Service equipment, Unique wire, Supplies shops not open 1 mention each

Panelists were asked what steps, if any, they are taking in response to supply chain difficulties.

13% are currently looking for a secondary supplier, up significantly from 8% in March. This increase is driven by firms with 1-9 employees, perhaps because they don't enjoy the same access to material as larger firms. In April, an additional 9% of the total sample say that they are considering it in the near future (statistically unchanged since March).

There are no other statistically significant month-to-month differences either in total or among subgroups.

NB: As was the case in March, the results have been re-percentage over the total sample to put the results into perspective.

| Q4. Are you looking at potential secondary suppliers to help mitigate supply chain shortages in the short and medium term? |       |               |                     |                |               |       |                             |       |              |       |
|--|-------|---------------|---------------------|----------------|---------------|-------|-----------------------------|-------|--------------|-------|
|  |       |               | Number of Employees |                |               |       | Large Number of Early Cases |       |              |       |
|  | Total |               | 1 - 9 Employees     |                | 10+ Employees |       | Group A (Yes)               |       | Group B (No) |       |
|  | March | April         | March               | April          | March         | April | March                       | April | March        | April |
| Total Sample   | (248) | (218)         | (153)               | (125)          | (95)          | (92)  | (124)                       | (103) | (124)        | (115) |
|  | %     | %             | %                   | %              | %             | %     | %                           | %     | %            | %     |
| Yes  | 8     | <b>&lt;13</b> | 2                   | <b>&lt; 10</b> |               |       |                             |       |              |       |
| No   | 4     | 4             |                     |                |               |       |                             |       |              |       |
| Not yet, but we might in the future  | 11    | 9             |                     |                |               |       |                             |       |              |       |
| Something Else   | 1     | 1             |                     |                |               |       |                             |       |              |       |
| Question not asked   | 76    | 73            |                     |                |               |       |                             |       |              |       |

Empty Cells indicate no difference between pairs; the month that is significantly larger is bolded; the month that is significantly smaller is italicized. Testing is at the 90% level of confidence.

In the next question, Panelists were shown a list of various scenarios under which their firms are being asked to work during the pandemic. This question was asked of those whose firms are open. Note that there is a mix of working in occupied and unoccupied job sites.

Compared with March, four of the scenarios increased **significantly**, suggesting that opportunities appear to have *expanded* rather than contracted.

- We are being asked to work in occupied businesses
  - Higher among the total sample and higher among firms in Group B states
- We are being asked to send crews to do outdoor work
  - Higher among the total sample; no differences by number of employees or by Group A or B states
- We are being asked to work in occupied residences
  - Higher among the total sample and higher among firms with 1-9 employees and/or those in Group B states
- We are being asked to work on new emergency hospitals or other healthcare facilities that are being created to address the coronavirus pandemic
  - Higher among the total sample and among those in Group B states

Along the lines of expanding opportunities, “None of the above (scenarios)” *declined* among the total sample in April compared to March and also declined among firms with 1-9 employees.

Although there was no difference among the total sample, there was an increase in April compared with March in Group A states on: We are being asked to do maintenance, service or repair work in businesses that are closed.

| <b>Q5. Which of the following has your company experienced?</b>   |               |               |                     |               |               |       |                             |               |              |               |
|---|---------------|---------------|---------------------|---------------|---------------|-------|-----------------------------|---------------|--------------|---------------|
|   |               |               | Number of Employees |               |               |       | Large Number of Early Cases |               |              |               |
|   | Total         |               | 1 - 9 Employees     |               | 10+ Employees |       | Group A (Yes)               |               | Group B (No) |               |
|   | March         | April         | March               | April         | March         | April | March                       | April         | March        | April         |
| Base: firm is open  | (201)         | (185)         | (116)               | (96)          | (85)          | (88)  | (90)                        | (82)          | (111)        | (103)         |
|   | %             | %             | %                   | %             | %             | %     | %                           | %             | %            | %             |
| We are being asked to work in occupied businesses   | 42            | <b>&lt;55</b> |                     |               |               |       |                             |               | 45           | <b>&lt;59</b> |
| We are being asked to do maintenance, service or repair work in businesses that are closed  | 37            | 43            |                     |               |               |       | 36                          | <b>&lt;51</b> |              |               |
| We are being asked to work on planned new construction, where there are no tenants in place   | 37            | 43            |                     |               |               |       |                             |               |              |               |
| We are being asked to send crews to do outdoor work   | 31            | <b>&lt;42</b> |                     |               |               |       |                             |               |              |               |
| We are being asked to work in occupied residences   | 29            | <b>&lt;41</b> | 38                  | <b>&lt;56</b> |               |       |                             |               | 29           | <b>&lt;41</b> |
| We are being asked to work on new emergency hospitals or other healthcare facilities that are being created to address the coronavirus pandemic | 6             | <b>&lt;11</b> |                     |               |               |       |                             |               | 5            | <b>&lt;13</b> |
| Other   | <b>5&gt;</b>  | 1             |                     |               |               |       |                             |               | <b>5&gt;</b> | 1             |
| None of the above   | <b>17&gt;</b> | 10            | <b>20&gt;</b>       | 8             |               |       |                             |               |              |               |

Empty Cells indicate no difference between pairs; the month that is significantly larger is bolded; the month that is significantly smaller is italicized. Testing is at the 90% level of confidence.

## Unanticipated Business Opportunities (Q6)

Of the 135 who made a comment in April, 87 said that there were no unanticipated benefits. Three themes were mentioned by almost 10 electrical contractors each: Emergency medical projects, Closed sites allow for eas(ier) access, More residential or commercial work (on a combined basis). The other unanticipated opportunities were mentioned by only a handful of respondents each.

In March, of the 156 who made a comment, 113 said that there were no unanticipated benefits or that things were a little worse. With the exception of doing more emergency work, mentioned by 11, all of the other unanticipated opportunities were each mentioned by only a handful of respondents.

The proportion that said “None” (no unanticipated benefits/opportunities) in April is in line with the proportion that said “None” in March. Observationally more electrical contractors cited easier access due to building being closed and/or more residential or commercial projects than in March, suggesting that electrical contractors may be finding ways of coping.

| <b>Q6. Have there been any unanticipated business opportunities as a result of coronavirus?</b>         |       |  |       |
|---|-------|--|-------|
| <b>Please be as specific as possible</b>  |       |  |       |
|   | March |  | April |
| Total Comments (March)  | 156   | Total Comments (April)                                     | 135   |
| None or Negative Comment  | 120   | None or Negative Comment                                   | 94    |
| None  | 113   | None   | 87    |
| None (Negative)   | 7     | None (Negative)  | 7     |
|   |       |  |       |
| Positive  | 26    | Positive   | 26    |
| Yes, work in emergency medical facilities or in essential settings (restaurants offering take-out food) | 11    | Emergency medical projects                                 | 9     |
| Yes, access to closed schools/less populated building   | 4     | Yes, closed sites allow for easier access                  | 9     |
| Yes, more homeowners /residential repairs   | 4     | Yes, more residential work (5) or more commercial work (3) | 8     |
| Yes, more generator/backup power service  | 3     |  |       |
| Competitors not available/may not survive   | 2     |  |       |
| Not yet, but expect more to come  | 2     |  |       |
|   |       |  |       |
| Miscellaneous   | 8     | Miscellaneous  | 15    |

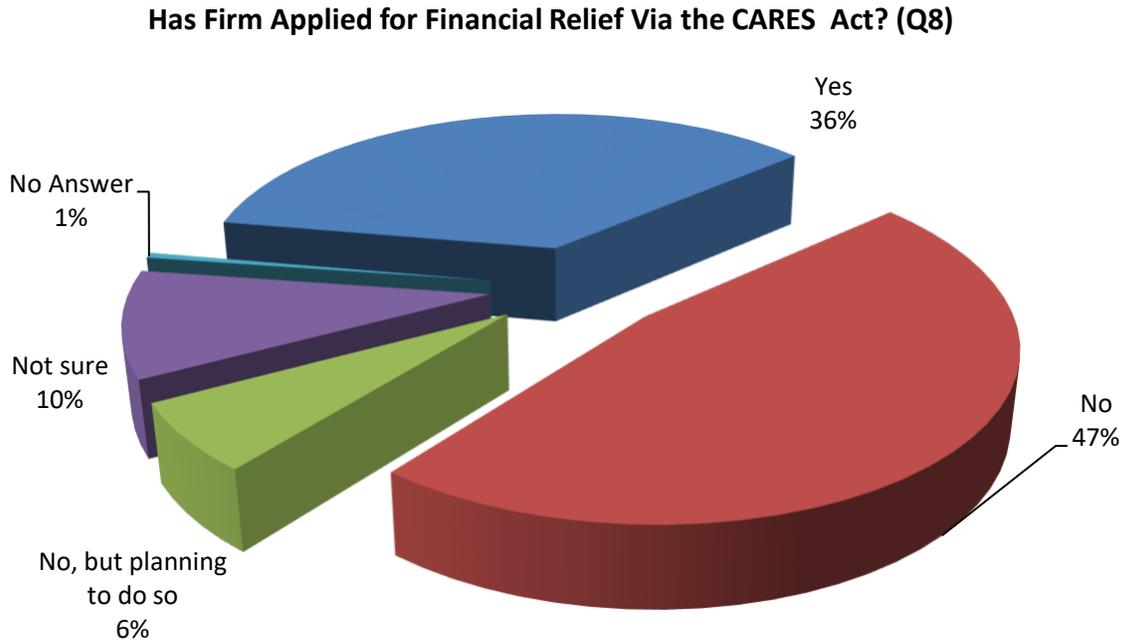
In April (but not in March), electrical contractors were asked on an open-ended basis about the up to 5 greatest challenges that they are facing as a result of the pandemic. Not surprisingly, the main themes that emerged are health and safety, logistics, financial issues and personnel issues. Note there is a great deal of overlap across categories, for example, getting PPE can also be classified as logistics (obtaining it) or even financial (paying for it). Here are the results among the total sample:

- Health and safety, getting PPE, social distancing on site, wearing masks/gloves, cleaning/disinfecting
- Logistics including limited/delayed access to materials, access to sites, compliance with restrictions/rules, scheduling, lack of in-person collaboration on projects, working remotely
- Personnel including manpower/getting people to work, employee fears/morale
- Financial issues, including finding work, cash flow/finances, cancelled/delayed jobs, customers are struggling financially, payroll, staying in business/planning for the future, estimates/bids.

| <b>Q7. What are your greatest challenges, if any, as a result of the coronavirus pandemic? Please list up to 5 of the most important challenges.</b> |            |            |            |            |            |              |
|--|------------|------------|------------|------------|------------|--------------|
| <b>MENTION</b>   | <b>1st</b> | <b>2nd</b> | <b>3rd</b> | <b>4th</b> | <b>5th</b> | <b>TOTAL</b> |
| Health/safety  | 30         | 11         | 3          |            | 3          | 47           |
| Manpower/Getting people to work  | 23         | 7          | 4          | 2          | 1          | 37           |
| Finding work   | 19         | 10         | 6          |            |            | 35           |
| Limited/Delayed Access to Materials  | 8          | 14         | 8          |            | 2          | 32           |
| Cash flow/Finances   | 11         | 11         | 5          | 3          | 1          | 31           |
| Getting PPE  | 9          | 6          | 7          | 3          |            | 25           |
| Social distancing on site  | 3          | 12         | 4          | 1          | 1          | 21           |
| Canceled/Delayed jobs  | 8          | 9          | 2          | 1          |            | 20           |
| Customers are struggling financially   | 2          | 5          | 4          | 7          | 1          | 19           |
| Access to Sites  | 9          | 4          | 3          |            |            | 16           |
| Compliance with Restrictions/Rules   | 8          | 4          |            | 3          | 1          | 16           |
| Scheduling   | 6          | 1          | 6          | 1          |            | 14           |
| Wearing masks/gloves   | 6          | 5          | 1          | 1          | 1          | 14           |
| Employee fears/Morale  | 2          | 4          | 4          |            | 2          | 12           |
| Cleaning/Disinfecting  |            | 4          | 2          | 2          | 1          | 9            |
| Payroll  | 5          | 1          | 2          | 1          |            | 9            |
| Staying in business/planning for future  | 4          | 3          | 2          |            |            | 9            |
| Lack of in person collaboration on projects  |            | 3          | 1          | 3          | 1          | 8            |
| Estimates/Bids   | 4          | 1          |            |            | 2          | 7            |
| Working remotely   | 2          | 2          | 2          | 1          |            | 7            |
| Loss of work   | 2          |            | 3          |            | 1          | 6            |

Also new in April, we asked electrical contractors about their experience in applying for financial relief via the Coronavirus Aid, Relief and Economic Security (CARES) Act. From what we learned from Panelists, relatively few have attempted to make use of it and for those who did, there were at least as many negative outcomes as positive.

- Only about 4 in 10 already applied (36%) or plan to (6%).



Electrical contractors were also asked on an open-ended basis about their experience, if any, in applying for financial relief via the CARES Act. Here is what the 122 that answered this question told us.

- Only about one in six who commented had a positive experience (19 mentions). Of the remainder, about two-thirds had either no experience (46 mentions) or a negative experience (33 mentions).
  - The negative comments themselves, shown in the Appendix, reflect a fair degree of anger at the cumbersome or confusing process, that smaller businesses may be at a disadvantage and what some see as abuses by some employees (staying home when there is work to be done).
- An additional 24 made a combination of positive and negative comments.

| <b>Volunteered Comments on Applying for Financial Aid Under CARES Act (Q9)</b> |                    |
|--|--------------------|
|  | Number of Mentions |
| None or no first hand knowledge  | <b>46</b>          |
| <b>Negative Mentions</b>   | <b>33</b>          |
| Negative (Confusing/lack of communication)                                     | 10                 |
| Negative slow process  | 7                  |
| Negative (did not qualify)   | 7                  |
| Negative (other)   | 5                  |
| Negative (too much paperwork)  | 4                  |
| <b>Positive</b>  | <b>19</b>          |
| Received aid smoothly  | 19                 |
| <b>Combination of Positive and Negative</b>                                    | <b>24</b>          |
| Applied (no response)  | 14                 |
| Approved (no funds yet)  | 2                  |
| Other  | 8                  |

Relatively few Panelists said that the pandemic has brought up any legal issues for their firm (7%, higher among firms with 10+ employees). This question was only asked in April.

- We hypothesize that there are two, possibly overlapping, reasons for the low reported legal impact: that electrical contractors and their clients are not particularly litigious and/or that the pandemic has not been disruptive enough in ways that would lead to legal action.

| <b>Q10. Has the coronavirus pandemic brought up any legal issues for your firm such as dealing with cancelled contracts or Force Majeure issues?</b> |       |                     |                |                             |               |
|--|-------|---------------------|----------------|-----------------------------|---------------|
|  | Total | Number of Employees |                | Large Number of Early Cases |               |
|  |       | April               | 1 - 9          | 10 +                        | Group A (Yes) |
| Total Sample   | (218) | (125)               | (92)           | (103)                       | (115)         |
|  | %     | %                   | %              | %                           | %             |
| Yes  | 7     | 3                   | <b>&lt; 12</b> |                             |               |
| No   | 80    | <b>90 &gt;</b>      | 66             |                             |               |
| Not Sure   | 12    | 6                   | <b>&lt; 20</b> |                             |               |

**Empty Cells indicate no difference between pairs; the bolded number is significantly larger; the italicized number is significantly smaller. Testing is at the 90% level of confidence.**

Panelists in firms that said they were *not* open for business in Q1, were asked in the April survey (but not in the March survey) about any restart plans that they had and what was involved. Of the 33 Panelists that fell into this category 24 responded as follows to Q12:

- No formal plans: 8 mentions
- Will re-open when we can do so safely and when work is allowed: 5
- Waiting for an ok from clients: 4
- Start slowly (when state re-opens) and work up to full capacity: 2
- Starting to re-hire: 1
- Waiting on financial assistance: 1
- Something else: 3

All Panelists in April were asked about the financial hit experienced by their firms. Across the total sample, the hit is not insubstantial with both a median and a mean of 40%. (The fact that the median and the mean are the same indicates that there are no extreme answers that inflate the mean.)

As shown below, smaller firms and those in Group A states (where the pandemic hit first) report a significantly higher hit.

- The fact that smaller firms felt more of a financial hit may be a third explanation for the pandemic not causing legal action: smaller firms – and possibly their clients – may be in less of a position to initiate legal action.

| <b>Q11. Financial Hit, If Any, Firm Experienced To Date As A Result of the Coronavirus Pandemic (MEDIAN and MEAN)</b> |       |                     |       |                             |               |
|---|-------|---------------------|-------|-----------------------------|---------------|
|   | Total | Number of Employees |       | Large Number of Early Cases |               |
|   |       | April               | 1 - 9 | 10 +                        | Group A (Yes) |
| Total Sample  | (218) | (125)               | (92)  | (103)                       | (115)         |
|   | %     | %                   | %     | %                           | %             |
| Median  | 40    | 50                  | 28    | 45                          | 31            |
|   |       |                     |       |                             |               |
| Mean  | 40.43 | <b>46.37 &gt;</b>   | 32.83 | <b>45.29 &gt;</b>           | 36.08         |

The next few questions pertain to anticipated future demand and were asked of all respondents. The first of these questions is about the expectation of a backlog of orders once the pandemic is over.

- The percentage anticipating a backlog of orders dropped significantly from 57% in March to 48% in April. This decline was driven by firms with 10+ employees, where about 20% ‘switched their vote’ from “Yes” to “Too soon to tell”. There were no other month-to-month subgroup differences.
  - Note that only about 1 in 10 do not expect there to be a backlog of work.

| <b>Q13/Q7. Do you anticipate that there will be a backlog of work orders once the emergency is over?</b> |                |       |                     |       |                |                |                             |       |              |       |
|--|----------------|-------|---------------------|-------|----------------|----------------|-----------------------------|-------|--------------|-------|
|  |                |       | Number of Employees |       |                |                | Large Number of Early Cases |       |              |       |
|  | Total          |       | 1-9 Employees       |       | 10+ Employees  |                | Group A (Yes)               |       | Group B (No) |       |
|  | March          | April | March               | April | March          | April          | March                       | April | March        | April |
| Total Sample   | (248)          | (218) | (153)               | (125) | (95)           | (92)           | (124)                       | (103) | (124)        | (115) |
|  | %              | %     | %                   | %     | %              | %              | %                           | %     | %            | %     |
| Yes  | <b>57 &gt;</b> | 48    |                     |       | <b>64 &gt;</b> | 45             |                             |       |              |       |
| No   | 11             | 13    |                     |       |                |                |                             |       |              |       |
| Too soon to tell   | 33             | 39    |                     |       | 28             | <b>&lt; 45</b> |                             |       |              |       |

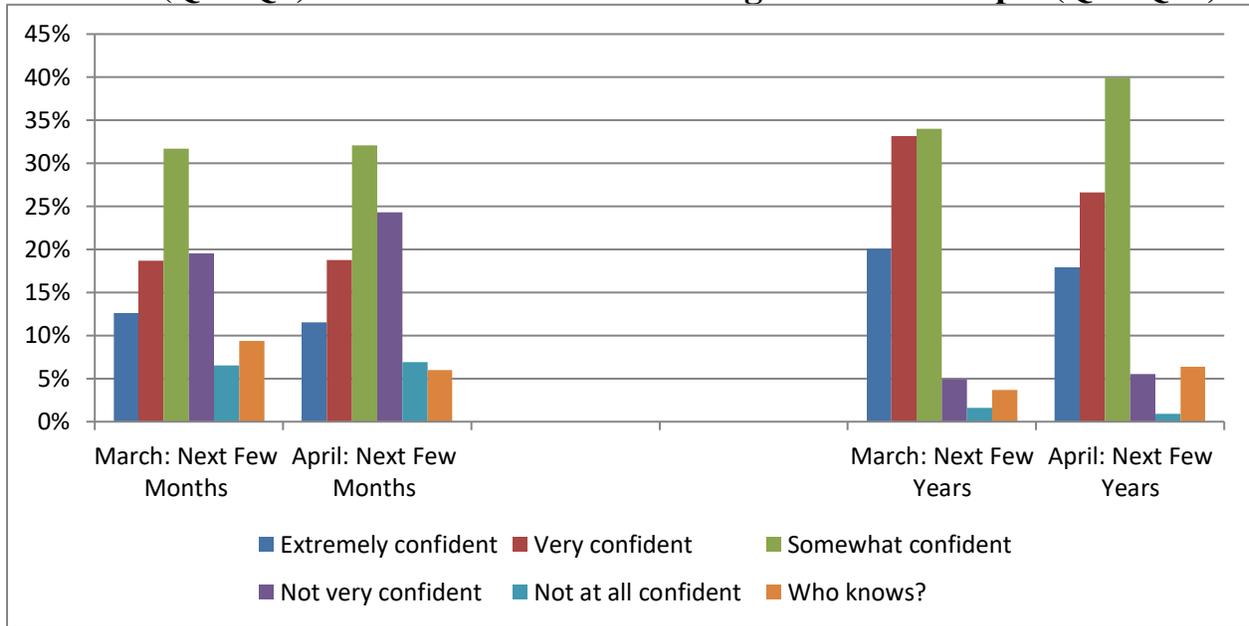
**Empty Cells indicate no difference between pairs; the bolded number is significantly larger; the italicized number is significantly smaller. Testing is at the 90% level of confidence.**

In both March and April, we asked the Panelists about their confidence in the economy over two time periods: short-term (over the next few months) and longer term (over the next few years)

In March, *short-term* confidence hovered around “somewhat confident” while in the case of confidence over the next few years, more than 50% were “extremely” or “very” confident on a combined basis.

In April, both short-term confidence and confidence over the next few years hovered around “somewhat confident”.

**Confidence in Growth of the Economy Over Two Time Periods: Next Few Months (Q15/Q9) and Next Few Years Among the Total Sample (Q16/Q10)**



However, as shown below, the apparent differences shown above are not significant. In fact, there are no significant differences among the total sample when the comparison is from March to April and only two among the subgroups for the 10+ employee and Group A states subgroup in Q16. There are no subgroup differences in Q15.

| Confidence in Economy Over Two Time Periods:<br>Q15 Over Next Few Months//Q16: Over Next Few Years |                            |       |                           |       |                     |      |                |       |
|--|----------------------------|-------|---------------------------|-------|---------------------|------|----------------|-------|
|  | Q15 (Over Next Few Months) |       | Q16 (Over Next Few Years) |       |                     |      |                |       |
|  | Total                      |       | Total                     |       | Number of Employees |      | Group A States |       |
|  | March                      | April | March                     | April | 10+                 | 10+  | March          | April |
| Total Sample   | (248)                      | (218) | (248)                     | (218) | (95)                | (92) | (124)          | (103) |
|  | %                          | %     | %                         | %     | %                   | %    | %              | %     |
| Extremely  | 13                         | 12    | 20                        | 18    |                     |      |                |       |
| Very   | 19                         | 19    | 34                        | 27    |                     |      | 38 >           | 26    |
| Somewhat   | 32                         | 32    | 34                        | 40    |                     |      |                |       |
| Not very   | 20                         | 24    | 5                         | 6     |                     |      |                |       |
| Not at all   | 7                          | 7     | 2                         | 1     |                     |      |                |       |
| Who knows?   | 10                         | 6     | 4                         | 6     | 3                   | < 10 |                |       |

## About the Respondents

Almost 6 in 10 (57%) of the Panelists who participated in this survey work for companies with fewer than 10 employees.

- There are no statistically significant differences in the company size make-up of the total sample or within subgroups.
  - Therefore, any differences that we do -- or don't -- see are not attributable to the company size distribution.

### Q17/Q11. Including yourself, how many people work for your company?

|              | March<br>(248) | April<br>(218) |
|--------------|----------------|----------------|
| 1-4          | 49%            | 46%            |
| 5-9          | 13%            | 11%            |
| 10-19        | 14%            | 14%            |
| 20-49        | 6%             | 9%             |
| 50-99        | 4%             | 4%             |
| 100-249      | 7%             | 7%             |
| 250-999      | 4%             | 5              |
| 1000 or more | 4%             | 4%             |

### Q19/Q13. In which state are you located?

The reported responses come from 44 states. Seven states -- CA, FL, IL, NY, PA, NC and WI -- have responses in the double-digits.

## Types of Construction That Are Being Negatively Affected

As we observed in our March write up, it is somewhat surprising that CII received more 'negatively affected' mentions than did residential. However, an explanation may be that some homeowners may feel more 'free' to spend than do some businesses.

- Interestingly, 12% say that none of this fairly inclusive list of building types are being affected in their immediate area.
  - There are no subgroup differences by number of employees (1-9 vs. 10+) or by Group A vs. Group B states (not shown).

**Q18/Q12. - In your immediate area, which types of construction are being negatively affected? Please select all that apply.**

|   | March | April |
|---|-------|-------|
|   | (248) | (218) |
| Commercial, Industrial, Institutional   | 59%   | 64%   |
| Residential, single family  | 48%   | 50%   |
| Residential, multifamily  | 43%   | 39%   |
| Non-building (such as line work, transportation lighting and communications, power generation, electric vehicle charging equipment, etc.) | 11%   | 12%   |
| Something else, please specify  | 5%    | 4%    |
| None of the above   | 16%   | 12%   |

## Appendix:

### Q6: Have there been any unanticipated business opportunities as a result of coronavirus?

Please be as specific as possible. This list does not include those who said “no” without any further comment.

---

A couple small emergency projects in (local) hospital

---

A few hardwired network drops for people working from home.

---

Actually working everyday in commercial buildings I consider us very lucky or I should say blessed  
Payments are slow but we agreed to longer terms

---

Additional work at Local Hospital

---

Areas closed or unoccupied allows for easy access

---

Cash flow issues

---

Catching up on back logged work

---

everything for me is business as usual, a few delays due to municipal staffing changes but other than that  
business as usual.

---

had to wire up a few break rooms (one added to each floor of several bldgs)

---

Have had many calls

---

Helping food stores set up curbside pick up areas by providing power and cabling.

---

Home Standby Generators

---

Hooking up equipment to make parts for ventilators

---

It's hard to anticipate what we can do and not put workers in bad places. Safety

---

Just work at infected sites

---

lots of restaurants and bars doing fixing up work with being closed for customers

---

may be time to consolidate with other co

---

medium and low voltage preventative maintenance work at closed Casinos, schools and other similar  
facilities.

---

More areas vacant, allowing work and repairs to go forward.

---

More Calls, others unable to come.

---

More residential service work as people are at home looking at potential projects.

---

No we are essential workers so military government power generation projects continue business as usual

---

No, just the opposite.

---

No, work has been slow.

---

No. Southern Arizona is business as usual.

---

Not for us, but for other contractors in our market.

---

Not really business is good and running as usual, if not, a little more than normal.

---

Not really, just working in places because they are empty or closed

---

not really. Just projects have been rescheduled to take advantage of unoccupied spaces

---

One small COVID response unit in a hospital. We were assigned part of the structured cabling work, and  
then it was determined it was not needed. Our portion of the project was cancelled.

---

**Q6: Have there been any unanticipated business opportunities as a result of coronavirus?**

**Please be as specific as possible, continued.**

This list does not include those who said “no” without any further comment.

---

Prices at the pump are low, Lots of people looking to work.

---

Repair work in homes

---

Residential upgrades to electrical system due to the property owners being off work.

---

Small business loans but they are not available

---

Some businesses are doing some minor remodels

---

Support of healthcare industry

---

There was one, but we were disqualified because our company was located near a considered "hot spot" for the corona virus.

---

We are a service company, I didn't anticipate business would be this slow.

---

We are getting more requests to submit bids than ever before. We were busy before, we can't handle winning those possible bids.

---

We have been able to do work during normal business hours where we would normally have to perform them during non-production / weekend days.

---

While some sites have been closed, we have been able to catch up on our workload.

---

Work has speeded up

---

Work on plants making parts for ventilators.

---

Working without interference of employees and public.

---

Yes a lot more medical work

---

Yes, our firm is working directly with multiple organizations to help them evaluate provisions for segregating people that have been diagnosed with COVID-19 and how to protect the uninfected from exposure, both inside and outside of hospitals.

---

Yes, received a contract to do the electrical work needed for one hundred shipping containers converted into mobile PPE sterilization units.

---

Yes, there is great potential for businesses. Lots of opportunities out there, the coronavirus is changing the business landscape. We do not believe that our country will return to the hold normal.

---

Yes. Several clients that had other projects on hold could now work on those projects for various reasons, included available resources due to their other locations slowing, pausing, or closing. It may be unusual, but we have seen a slight increase of work in a few markets.

---

Yes. We have experienced volume increases in packages shipped thru us

---

Yes. Medical suites built off site and shipped to destination pre-assembled

---

**Q9: What experience, if any, has your firm had in applying for financial relief for your business via the Coronavirus Aid, Relief, and Economic Security (CARES) Act?**

**Please be as specific as possible.**

This list does not include those who said “no” without any further comment.

2 employees applying for Family First Coronavirus Paid Sick Leave in order to care for children out of school/daycare. We applied for and received a Paycheck Protection Program loan from our local bank.

Access to websites

Applied for EDIL with no results Should have applied for PPP Tried this morning and my bank said the window closed 4/16

applied for PPP

Applied for still waiting for final approval and getting funds.

Applied on April 3, approved on April 4th, funded on April 7th. Received EIDL loan on April 28th. SBA began paying my Wells Fargo SBA loan on April 1st

Applied the first time, they changed the application and had to redo the application. They checked my credit twice but never heard anything from them. I did get my advanced money. Applied for PPP loan but haven't heard anything

Applied, haven't heard back.

B of A is very difficult to deal with. Applied ASAP, did NOT get funded!

Bank did not have enough employees to answer questions and get the application completed I did not make the first round I was told the money ran out. our co has applied for the second round of funding, I was told we are in the Q

Been approved and haven't received money yet.

Cannot access the bank sites to apply

Citibank took an extra week to roll it out

confusing

Delayed for 2 weeks

Difficult process, hard to get answers. Lots of speculation.

Employees are taking advantage of CARES sick and family leave to sit at home and get paid when we have work for them. One guy stopped coming to work and claimed unemployment. Our PPP has funded and it is tough to get everyone to want to come back to work.

Fairly simple process.

filed but no response as of today

FOLLOWING DIRECTION OF SBA MANAGER TO APPLY FOR LOAN MY HUNTINGTON BANK IS UNAVAILABLE FOR FOLLOW UP AFTER MAKING APPLICATION.

Found out I do not qualify.

Good experience with Covid relief helps me to stay at home.

Had to re-apply.

Heard nothing back

I am trying to get unemployment

I do not know.

I have not applied. They are out of money anyway.

I luckily have had no problems, when compared to the rest of the world

I'm not in accounting and do not have first hand information about the program.

**Q9: What experience, if any, has your firm had in applying for financial relief for your business via the Coronavirus Aid, Relief, and Economic Security (CARES) Act? Please be as specific as possible, continued.**

This list does not include those who said “no” without any further comment.

- It is Useless and doesn't seem feasible to my small business would not help !!!!
- It sounds like the initial monies went very quickly to the big-boys. We applied within 24-36 hours of the initial news. Supposedly our application is in queue for this next go-around that was just approved yesterday (4-23-2020).
- it was a lot of work, but we got some. I think we needed more.
- it was very confusing and information that I needed to provide was repetitive and the process was slow....
- Just filled out SBA forms, still waiting.
- Just some added Time off to help with children.
- long wait, banks jammed up
- Meeting payroll
- My business bank Wells Fargo NO help Credit Union maybe helping they say i'm on the list for a loan. NO fund yet
- NA We have over 500 employees and get NOTHING.
- No luck, filling out paper work twice or three times. Bank drop the ball.
- None other than completing the correct government forms.
- None, and I do not plan on using any governmental support
- None, I am slowing down as a sole proprietor. I am over 70 and love the work, just not able to keep up.
- our bank didn't start processing until a week into the program
- Our controller is handling that and i am not aware.
- Our local bank was great we had PPP funds in less than 2 weeks
- Pain
- Paperwork
- Paperwork constantly changing
- Payroll Protection
- Positive
- PPP came through 2 days ago, They didn't even tell me, I discovered the money in my checking account this afternoon by accident.
- received ppp money
- Received the PPP so we can keep all employees working
- Slow moving process
- still waiting to hear if we receive PPP
- Success we were approved for a loan
- The application process is difficult to navigate/lack of good information that is actually applicable.
- The Experience was OK. Took Longer than expected but was able to get proper relief.

**Q9: What experience, if any, has your firm had in applying for financial relief for your business via the Coronavirus Aid, Relief, and Economic Security (CARES) Act? Please be as specific as possible, continued.**

This list does not include those who said “no” without any further comment.

- Tried filing for Florida unemployment on April 5th. Still waiting for status update.

---
- Tried filing for unemployment 3 weeks ago with the state of Florida as self-employed. Took me a week to successfully file. Never got a confirmation email. Went on yesterday and it still shows "Pending submitted". I tried starting a second application and it said I already have a claim filed and do not need to file another.

---
- Turned down for aid

---
- Unsure

---
- waiting for approvals

---
- We applied the 1st day the the PPP was available but funding ran out before ours was approved but got approved on the 2nd week of the 2nd funding. The problem is that I made business decisions to keep everybody employed based on the 1st day of applying believing it would happen fast and now the calculations for the PPP grant are only counted from the funding starts so anyone I kept with hazard pay does not count towards what is covered by the PPP

---
- We are to large to qualify

---
- We got the ppe loan our bank added unnecessary forms I sent to my attorney he told me he had the same loan approved for his co there were only 2 forms my bank had 50 . We also applied for the SBA loan we received the 10000. We still haven't got an answer on the loan

---
- We have an expert office manager, who was on top of applying and taking care of securing our relief.

---
- We have been approved for PPP

---
- We have been funded but the process was worrisome and we are still not 100% sure of how it will all play out

---
- We have experienced a reasonably smooth application process. As with most loans, the lenders continue to request additional documents to be sent or signed, but no more than with any other loan process from the past. Overall, we have been satisfied with the process.

---
- We received a PPP loan

---
- We received it. It went very smooth

---
- We received our financial aid.

---
- We rely on our accountants

---
- We were able to work with our bank and apply for the PPP program. We were successful in getting the funds.

---
- We were one of the first to apply in our area and were successful in obtaining the Aid.

---
- went real good

---
- Yes can't get it

---

**Q12. Does your firm have a restart plan and, if so, what does it involve?**

**Please be as specific as possible.**

This list does not include those who said “no” without any further comment.

After New York State reopens for business I will resume taking care of existing customers. I am not taking on any big jobs. I work alone.

call back customers to start work

First is employee safety which would mean putting a plan in place to disinfect jobsites. Transporting employees to and from work within the guidelines. Second is jobsite safety. Supplying masks, gloves and sanitizer. Third is securing material Fourth is making sure the customers can pay to keep a cash flow

Ned to re-hire, get communication out, etc.

No we will proceed and maintain safety

No, at least not yet.

No, I am planning to wait until I can get my clients back.

Reopening next week

Restart jobs, secure future work.

See answers to the biggest challenges question

Some people have gotten pay cuts others have been layed off. Until work orders start coming in the plant is shut down.

Start out slow and work up to full capacity

trying to get back to work and as safely as possible, so we can fulfill our contracts already awarded...

Willing to return to entering houses once there is a definite answer of what is safe. At this point it doesn't seem that anyone has that answer.

Work is on hold but will start as soon as allowed and safe.

working with clients, waiting for the ok to go back

Yes, Once our customers allow us back on jobsites and we receive our financial assistance as part of the PPP we'll be going back to work.

Yes. When our clients open back up for us to work we are going in with full ppe and masks gloves and all necessary equipment to keep everyone safe.

**Q14. Do you have any optional comments about anything covered so far?**

As one of my favorite heroes always said, "Keep the faith baby."

can't go across state lines

democrats are killing America.

everyone needs to listen to safety procedures

I am young (early 30's), and have very high hopes for the future. While I do not have faith in our government (neither republicans nor democrats), I do hope that the good people in the construction, design, engineering, development, business, and other markets continue to invest in their communities, companies, and people in order for our society to thrive. I have seen the vision of many peoples come to life, specifically businesses that grow and contribute to their community. I love what I do (engineering), and I desire to contribute to the betterment of society. If there are others similar to myself (and there are many...), then I do not worry for what the future holds.

I believe Air conditioning season will be a bit busy restrictions or no restrictions

I believe the backlog of work will be great enough that completion will be longer than usual due to many contractors not being able to open as soon as the government declares business can return to normal.

I feel as though the work will pick up quickly if things open quickly. But, the longer you things stay closed; the longer it will take for things to rebound after things reopen.

I think the pandemic is a terrible thing but it honestly has had little to no impact on my business. If anything, it has increased my business, however when a shelter in place order was first instilled, some clients held onto their money longer than normal. However, all clients have paid their bills since then.

It's a bad situation but because people don't think it's even worse

LETS GET BACK TO WORK, if we don't it will be far worse

My men work paycheck to paycheck some have gone on unemployment others haven't. They are in terrible economic condition. I am lucky this occurred at a time I had an upswing in cash flow. And Money has continued to come in for old completed jobs.

Not at this time

Not planning on overtime to meet schedules the customer will deem essential.

Not really, just sucks!

Not sure work stoppage needed to happen

Office staff is working remotely as much as possible. Some field staff is furloughed due to job/customer site restrictions. Some field staff is being paid for idle time due to the PPP loan.

The government has mostly closed but contractors are the essential workers.

The Liberals and fake news has made it near impossible, added to the Virus.

Tourist season will affect projects. If that even happens. Too many unknowns.

Uncertain if people will have funds to do projects.

Until businesses are able to open up we will continue to be slow.

volunteers sewed face masks & made available free to anyone working!

Wait and see.

We are lucky to be considered essential I pass electrical service trucks every single day

we seem to be doing fine, wish everyone was also.

Will my company be legally responsible if one of my workers gets a customer sick?

Worried about summer and fall if work will be available to bid

## Q20. Please feel free to share any additional comments.

Again, things just suck, boring, no idea what to do....

Can't wait until things go back to normal!

conflicting information about what construction is allowed in various areas from City of New York where the pandemic is worst.

I am head of maintenance at a company that makes and sells restaurant equipment. Many of our customers are shutdown or closed due to the stay-at-home policy.

I don't understand why, if any, construction projects should slow down. Industries that manufacture the raw materials should be able to implement corporate measures to isolate employees from close contact with one another, employ strict hygienic measures and anti-contagion protocols, and still produce what is demanded. As for construction sites, there are no better environments to work in for preventing virus spread than outdoors!! There's adequate fresh air ventilation even in a new enclosed building and workers are pretty much apart from one another anyway. We're in the service industry, and our customers are confident in not only our technical skills, but also our commitment to keeping each other safe.

I hope the stay at home order is over soon.

I still see a lot of contractors on the street. It actually been halo full with out a lot of traffic.

It seems as the smaller residential contractors are feeling the most negative effects based on conversations I've had with others in the same field

Keep burdensome government regulations out of the way of progress

keep these surveys coming

MASS. is a communist state right now, the Dems. want to keep us shut down. just what the Communist Chinese wanted, The Chinese must pay for what they did, they should forgive any debt we have with them

Most of our work is service oriented, in all fields of service. So many companies have been shut down. It will take months for my company to rebound from this.

No one knows the legal ramifications of this nightmare. Pennsylvania gave permission for all 500 school districts to decide what is essential.

ONE THE DAY OF COMPLETION OF A SMALL CONTRACT \$5,500. MEDIUM FOR US, THE CUSTOMER CHANGED HIS PLANS AND QUIT HIS NEW BUSINESS SITE WHERE WE HAD JUST FINISHED THE ELECTRICAL CONTRACT. HE LIED TO US ABOUT HIS PAYMENT RESPONSIBILITIES SAID CORPORATE WOULD PAY THEN BLOCKED OUR CALLS.

Our area relies on tourism and second homes. Most people live pay check to paycheck and have not seen money for at least 6 weeks.( no unemployment, no work) By the time the stay at home order is lifted many families will be so far behind a lot of work will have to wait.

Our governor needs to be impeached.

Pray that all the EC in this country preceded with safety and respect for all other's

Stay the course. People are scared. May look serious to retire.

Utility contracts with telecom company suspended. Planning to be back to work, modified work, by mid-May.

we had 22 employees and would probably been up to 30 by now.

We'll keep going as best as we can.

With all of the losses, I just hope our customers will have the ability pay us for past and future work ahead.