

ELECTRICAL CONTRACTOR Media Group

COVID-19 Effects on Electrical Construction Report

May 15, 2020

Report Date: May 15, 2020

Purpose: The study focuses on the pending recovery from COVID-19 shutdowns and determine what electrical contractors need to get back to work. The survey covered current conditions on projects, change in project categories, hands-free lighting controls, the effect of COVID-19 on current workforce, what is needed to get back to full capacity, foreseeable challenges, the effect on supply chain, and expectations for reopening.

Methodology: The survey was conducted between May 6th, 2020 and May 13th, 2020. The data was collected through an online survey directed through the ELECTRICAL CONTRACTOR magazine subscriber database. The database is made up of electrical contractors who subscribe to ELECTRICAL CONTRACTOR. A total of 507 responses were collected with a 94% response rate. An incentive for participation was offered. The first 100 responses would receive a Lutron product.

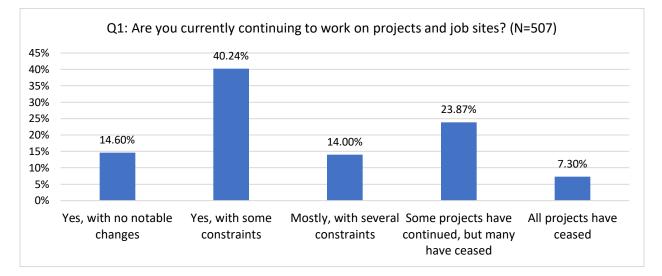
Survey Questions and Design: Lutron Electronics Co. and ELECTRICAL CONTRACTOR magazine partnered together to formulate the survey questions and design.

Prepared By: The survey was prepared and analyzed by NECA research. Identity of respondents is kept separate from the survey responses and reported in total to maintain confidentiality.

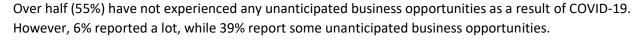
Appendix: Includes all comments where questions included "Other" or "Something else". For Q17 and Q21 all free responses are included. Please note due to content some responses have been screened for publishing purposes. Survey outline is included, as well, as skip logic steps.

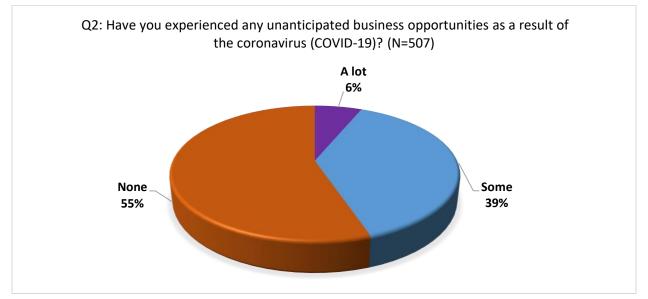
Detailed Findings

Only 7.3% reported all projects have ceased. Over half of the respondents reported that they are continuing to work on projects and job sites with no notable changes (14.6%) or some constraints (40.24%).



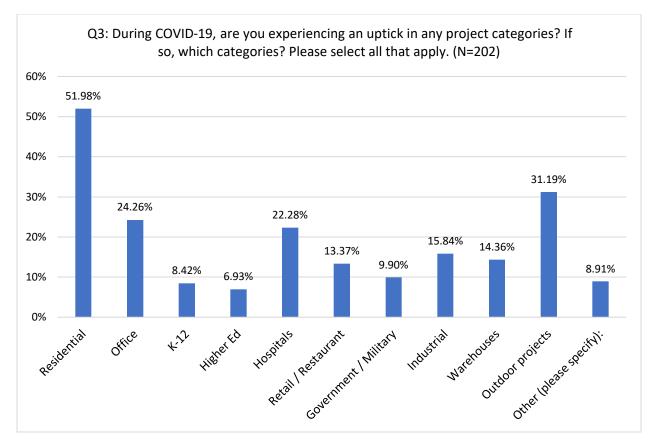
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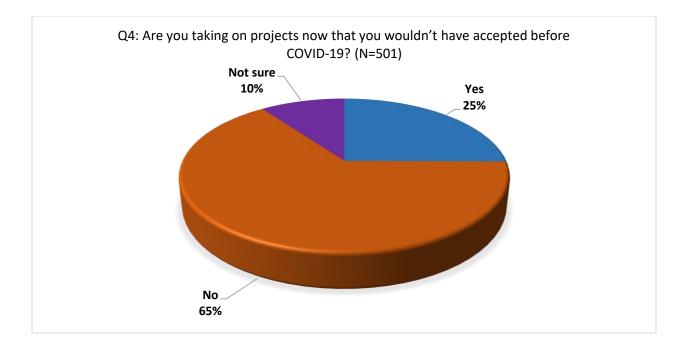
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For those who have experienced a lot (6%) or some (39%) unanticipated business opportunities in question 2, we asked them to select which project categories are experiencing an uptick. Over half (51.98%) of the panelists indicate an uptick in residential. Followed by outdoor projects (31.19%), offices (24.26%), and hospitals (22.28%). Higher education (6.93%) had the least amount of uptick.

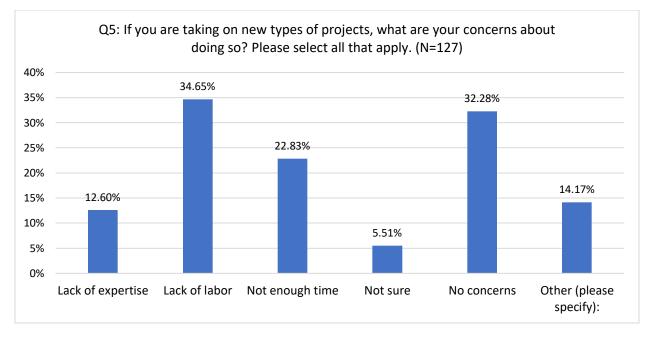


[Percentages add to more than 100% because more than one response was allowed.]

Over two-thirds (65%) indicated that they are not taking on projects now that they wouldn't have accepted before COVID-19. However, a quarter (25%) indicated that they are taking on new types of projects.

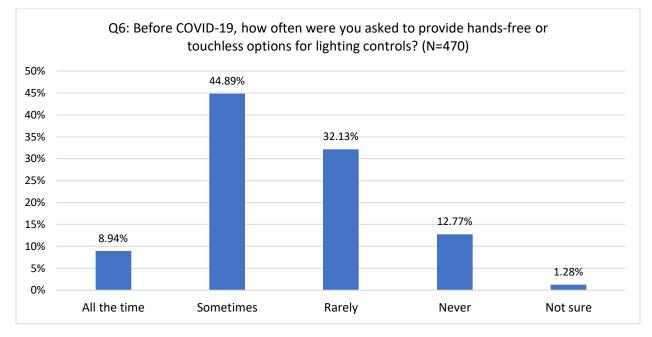


For those that selected yes (25%) to taking on projects now that they wouldn't have accepted before COVID-19, we asked them what concerns they have doing so. About one third (34.65%) indicated lack of labor as a concern, while 32.28% indicated no concerns. Those who selected "other" reported concerns about lower profit margins when taking on new types of projects (most notably residential projects).



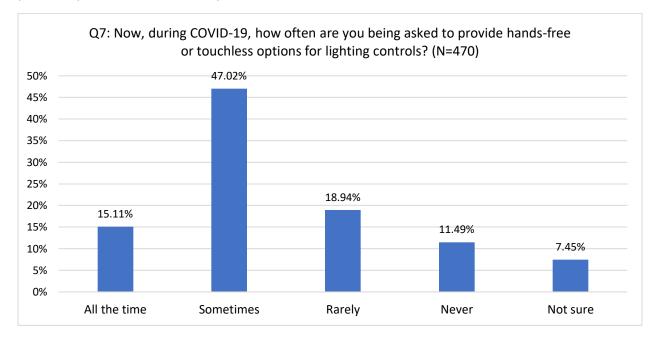
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Before COVID-19 only 8.94% were asked to provide hands-free or touchless options for lighting controls all the time. Nearly half were asked rarely (32.13%) or never (12.77%) to provide hands-free or touchless options for lighting controls before COVID-19.



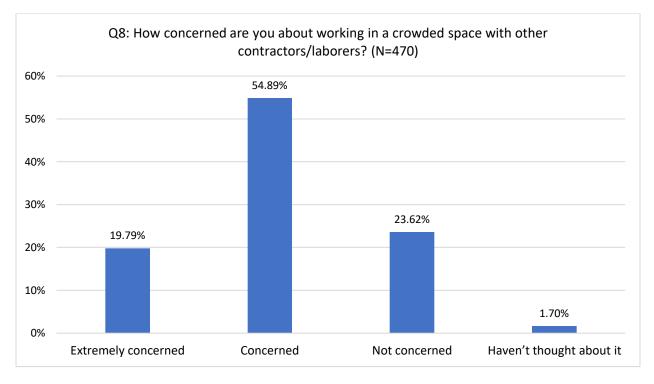
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Compared to the previous question, now during COVID-19, 15.11% are being asked to provide handsfree or touchless options for lighting controls all the time. Notably, those who chose rarely in the previous question has been nearly cut in half (18.94%).

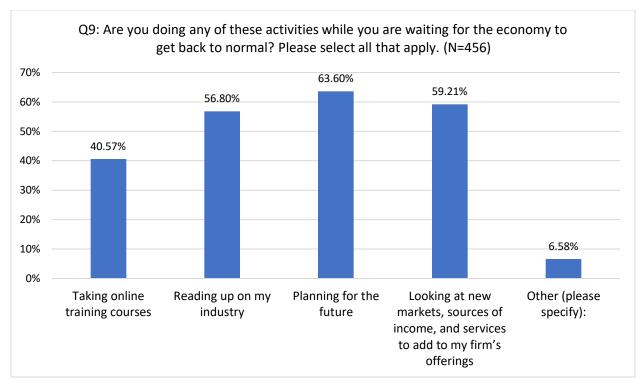


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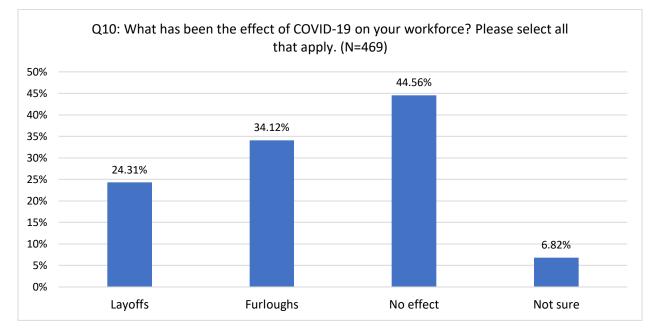
Over two thirds of the panelists indicated extremely concerned (19.79%) or concerned (54.89%) about working in a crowded space with other contractors/laborers. Less than a quarter (23.62%) indicated not concerned at all.



Panelists selected planning for the future (63.60%), looking at new markets, sources of income, and services to add to my firm's offerings (59.21%), and reading up on my industry (56.80%) as the top activities while they are waiting for the economy to get back to normal. Those who selected "other" a majority reported business as usual.



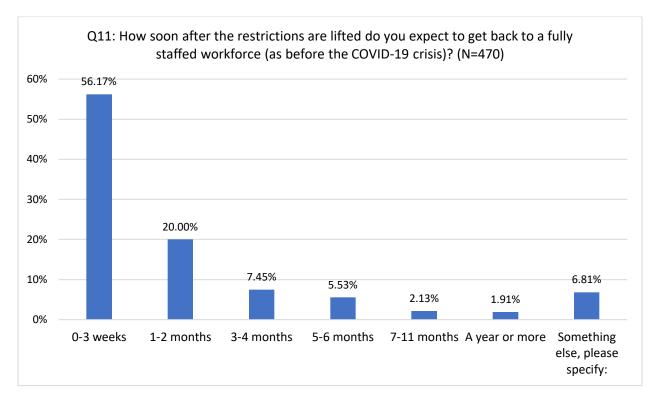
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Over half of the panelists indicated layoffs (24.31%) or furloughs (34.12%) as the effects of COVID-19 on their workforce. However, 44.56% indicated COVID-19 had no effect on their workforce.

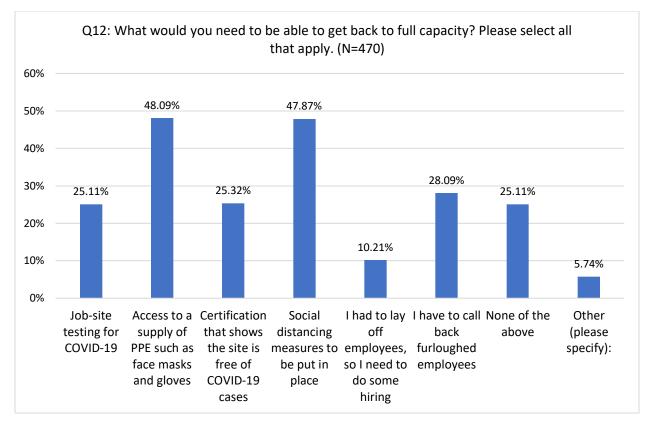
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Over half of panelists indicated 0-3 weeks (56.17%) as when they expect to get back to a fully staffed workforce (as before the COVID-19 crisis) after restrictions are lifted. Those who selected "other," a majority reported that their staff never decreased.



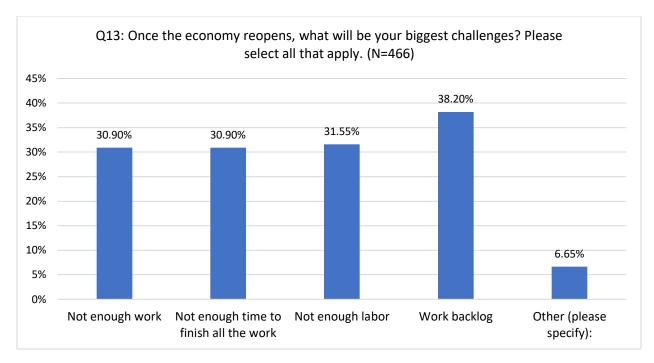
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In order to be able to get back to full capacity, panelists selected access to a supply of PPE such as face masks and gloves (48.09%) and social distancing measures to be put in place (47.87%) as the top two needs. Those who selected "other," a majority reported that need customers and business to open back up.



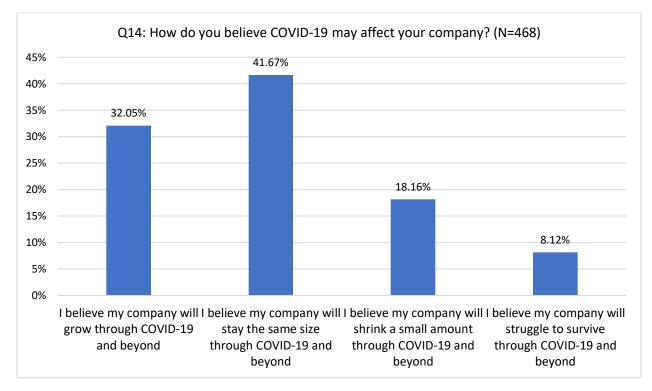
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Once the economy reopens, panelists indicated work backlog (38.20%) as the biggest challenge. Not enough labor (31.55%), not enough time to finish all the work (30.90%) and not enough work (30.90%) followed as the biggest challenges. Those who selected "other", a majority reported customers lacking funds and safety for employees as the biggest challenges once the economy reopens.

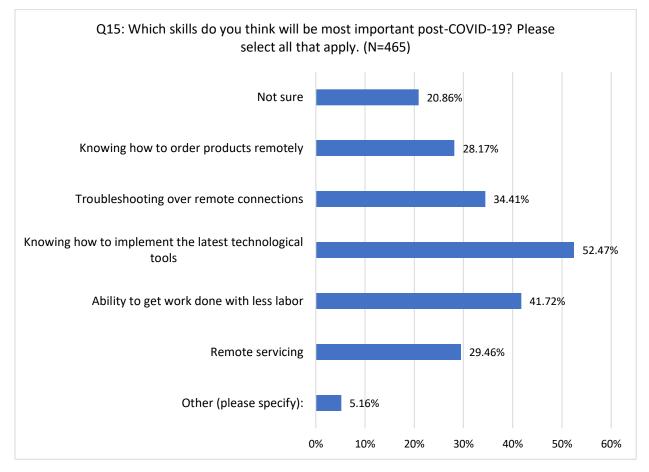


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A majority of panelist believe their company will stay the same size through COVID-19 and beyond (41.67%), while 32.05% believe their company will grow through COVID-19 and beyond. Only 8.12% believe their company will struggle to survive through COVID-19 and beyond.

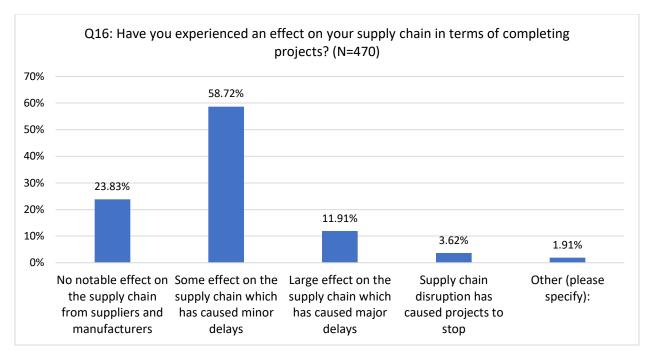


Over half of the panelists selected knowing how to implement the latest technological tools (52.47%) as the most important skill post COVID-19. Ability to get work done with less labor (41.72%) and troubleshooting over remote connections (34.41%) followed as the most important skills post COVID-19. Those who selected "other," a majority reported having a "new normal" revolved around safety as an important skill post COVID-19.



[Percentages add to more than 100% because more than one response was allowed.]

Over half of the panelists indicated some effect on the supply chain which has caused minor delays (58.72%) in terms of completing projects. Only 3.62% indicated supply chain disruption has caused projects to stop. Those who selected "other", a majority reported that they do not see an effect on the supply chain since they themselves have ceased work.



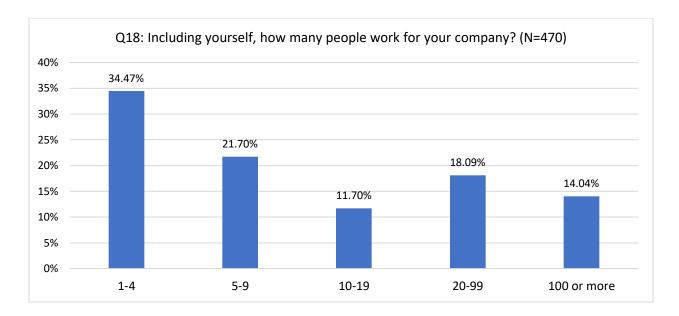
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Q17: What do you consider to be the new normal in construction? What do you expect from the reopening phase of these shutdowns? (N=347)

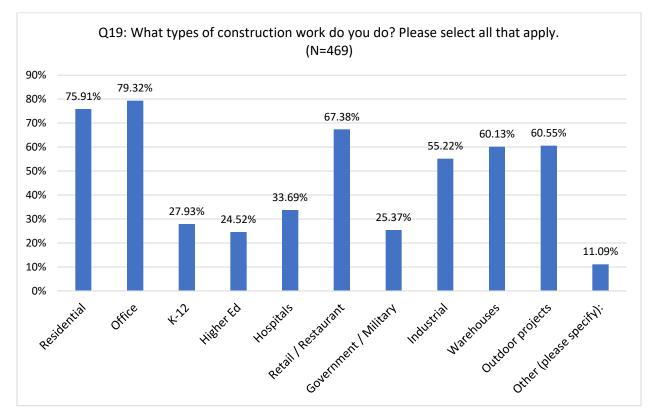
Over a third of comments mentioned having to institute social distancing, PPE and tighter safety measures as being a potential new normal in construction.

Panelist Demographics

Majority of panelists from this sample represented company sizes of 1-4 (34.47%) and 5-9 (21.70%).



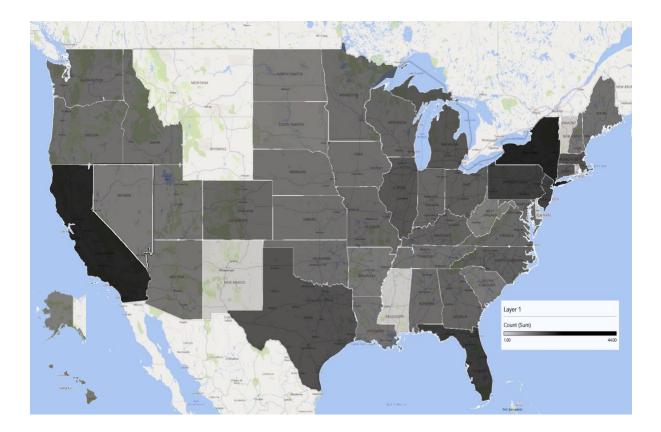
For types of construction work, office (79.32%), residential (75.91%), and retail/restaurant (67.38%) were selected as the top three among the panelists. Those who selected "other", a majority reported that they do senior care and retirement housing.



[Percentages add to more than 100% because more than one response was allowed.]

Q20: In which state are you located? (N=465)

The top 5 states represent among panelists were New York (44), California (43), Florida (30), Pennsylvania (29) and New Jersey (28).



Q21: Please feel free to share any additional comments. (N=54)

Additional comments reflected respondents outlook on the situation. Most of the outlooks were positive, specifically, hopeful for a bounce back of the economy and fast recovery. Some comments reflected concern on what the future will bring. Many respondents gave thanks at the end.

Appendix

Q3: During COVID-19, are you experiencing an uptick in any project categories? If so, which categories? Please select all that apply.

Other (please specify):

Temporary power for temporary medical tents/offices for covid testing **Religious; Law Enforcement** CCTV camera and security installations Generator and home backup power needs. Service work Security Systems Remote access/work at home for voice and data networks No Service upgrades and panels No Been furloughed since March 23 unable to view or even read about existing conditions High-rise common area maintenance Urgency call-outs light commercial for telework. None Recreational Vehicle and off grid / overlanding automotive electrical upgrades including pure sine inverters and solar kits with storage. Senior Centers and Drug/Rehab facilities Home office & automation

Grocery store service-related calls

Q5: If you are taking on new types of projects, what are your concerns about doing so? Please select all that apply.

Other (please specify):

Uncertainty about the economy

Normally don't do residential because of payment issues.

Smaller or more complex projects

Health

Lower margins

Projects that require much more work and return less profit.

One of our people getting sick.

Big projects that were schedule during this pandemic has been postponed for this reason. I was supposed to used half of people to create social distant in with the crew.

PPE Clothing and Training for employees

Some are out of our normal types of projects

Cost

Pricing

Taking projects for lower margin.

Providing services that would not have been considered adequate before.

Fear of spread of virus on technicians

Expanded work

Not enough profit margin

Whether we can turn a good profit.

Q9: Are you doing any of these activities while you are waiting for the economy to get back to normal? Please select all that apply.

Other (please specify):

Estimating more projects I'm spending more time working in and on my own home. Staying safe while learning how to adjust to the new world normal Retirement other businesses Exploring new developments related with the future procedures that will need to be implemented to continue working and creating safe environments for customers and employees. Trim the fat where I can Work as normal booked In house projects and building maintenance. Nothing is changed Reading the NEC and taking water class at local community college Preparing to work in Covid Environments Working Flight training I am an apprentice instructor at night, and we just started back - (small classes) Working in our own shop Working every day Electric car chargers Business as usual Waiting for guidance and PPE with testing New erp software Lots of Shades and Lighting! It is our focus to grow exponentially in these categories! No Have had no change in bidding opportunities Na Looking over drawings Getting a lot of projects done with no interference by students and workers Catching up on office work Nothing we are not being affected by COVID-19 Continue working on the same projects fast pace and hurry up with less folks since some are at home.

We have to have a plan in case the Covid 19 Virus comes back.

Q11: How soon after the restrictions are lifted do you expect to get back to a fully staffed workforce (as before the COVID-19 crisis)?

Something else, please specify:

I will retire I never stop working At this time, thanks GOD we are still working with all our staff. No change expected No layoff yet We are fully staffed, just doing work that we can do, but shouldn't (nothing dangerous at all) Nothing has changed. I work by myself. We have not changed staffing levels We never stopped We still have a full staff Never slowed down We are fully staffed now and have been the whole time. Self employed I am a small business only me and one other employee. We have been working regular hours. Same staff level. Fully staffed now No effect We are at full strength now, but after the PPP money is used, we will be furloughing. We are still at 100% staff Still full staffed all along We are still fully staffed Called our workers back last week. We are at full staffing We have not slowed down! Already fully staffed but looking to hire additional We are fully staffed We stayed full staff We are currently working at full staff We did not have to lay off any of our employees Hopefully immediately, but the economy will decide that

Q12: What would you need to be able to get back to full capacity? Please select all that apply.

Other (please specify): Adjust how we perform our work safely Capital , money this has been disastrous for my small company. I may lose it all including my house. SBA grant Money! Get some common sense from everyone in government. Stop making this more than it really is Need customers to open up.

Training.

Hopefully by September this has been a bad dream.

For the economy to re-start, and people to start contracting again for construction projects.

Never stopped full capacity but had to start items checked off

Other businesses to open up so we can continue working.

Portable hand washing stations and Purell stations.

Strong economy

Get some more jobs

We already called them back.

Reschedule jobs where they canceled due to the virus outbreak.

May need to hire more technicians if we continue to be this busy

Antibody testing of employees.

General contractors to reopen their business

Awaiting for customer sites to allow access to their site

Wear masks

Never stopped working

Funding

More service work. People are concerned about having us in the house even though we have social distancing measures in place

Washington state mandated restrictions need to be lifted.

Q13: Once the economy reopens, what will be your biggest challenges? Please select all that apply.

Other (please specify):

Capital, I need money to buy parts and to pay my employees.

retirement

Navigating the new safety measures - limits in crew size, PPE, how many total people on a floor or site

Lag time between work in progress and work to come back on line

Customers that have put things on hold would be asking to take priority in regards to their project needs.

Maintaining a regular work flow. Expect the see a ramp up post virus orders.

I believe there will be plenty of work, however I think people will be reluctant to let us on their property.

Keeping everyone safe and healthy.

Adjusting to new safety measures and protocols

Customers access to money to pay for the work.

I feel like I will experience a gap this fall as I've only been finishing up jobs not starting any new ones now for 2 months.

Unknown

Non-issue

Changing facilities and homes to support the "new normal". Fewer customer companies workers in a given room/bldg size. New work.

Working under new covid working standards

None

More traffic on the roads and higher gas prices

No challenges I can see.

Customers without discretionary income

I was minimally affected in my business because of Covid 19 because I had started to change the DNA of the business prior to the economy shut down. I now have a better electronic presence, have shifted from construction to consumer RV, and focused on a very niche market.

Reduction of backlog due to Covid triggered recession

Concerned, that customers will lack capital to initiate projects.

Payments for jobs completed

Currently we are booked for about 1.5 months. But want to make sure the pipeline is full for future.

Hope offices, commercial, restaurants will make a come back.

6 months from now could be a problem

Concerns about keeping people safe from the covid19 while they are working

Population in our facilities

None of the above

Financing

Full impacts are still unknown

Customers lacking funds

Q15: Which skills do you think will be most important post-COVID-19? Please select all that apply.

Other (please specify):

We have pre Covid19 performed many functions that now align with today's orders It's a whole new world. Social distancing as a norm I will retire Reassuring customers that we are committed to their safety Worksite health and safety skills. Carefully paying attention to possibilities of illness affecting your work place. Undetermined In house fabrication and pre-assembly Educating...tasks may take longer and cost more for the customers Alter product offerings that facilitate the "new normal". All the above Remote meetings. Crew scheduling. A program that communicates clearly to customers that we understand safe hygiene practices and that we adhere to them.

The same skills required prior to COVID-19

Removing fears from partners and employee, also customers

None

Fulfilling different site safety requirements and special conditions for each project/customer.

Keep doing what we are doing before & after covid-19

None of the above

Q16: Have you experienced an effect on your supply chain in terms of completing projects?

Other (please specify):

Large effect on supply of PPE for workers. Currently we have been able to work with our own stock. We are running low and in a few cases ran out.

We ceased all work . We followed Governor Newsom instructions and President Trump we all stayed home to stop the spread here in San Diego.

No effect at all

Some product that would take a couple of day to be delivered now it takes 6-14 days to deliver. There is no supply chain at this moments, but no works either, for works to be done we need special permits for our trucks to carry materials to job sites

Increased pricing on materials

Will not know until projects restart

Lots of social distancing and in time hopefully everything gets back to normal

Still pending, impact is not confirmed for lighting fixture procurement .

Q17: What do you consider to be the new normal in construction? What do you expect from the reopening phase of these shutdowns?

None of our projects have shut down.

I foresee contractors rushing jobs to completion to generate cashflow.

Physical distancing, increased sanitation. We are anticipating business to slowly come back to levels We were at pre pandemic

Small slow recovery next few years

I expect some projects delayed or scaled back. Some projects have been cancelled. We will need to keep working with PPE and distancing.

Business as usual

Tighter procedures on distancing.

I hate the term "new normal " we are in a temporary emergency phase that will pass sooner or later. The greatest upcoming job site problems will be worker distancing .

PPE on all jobs social distancing

We will get back to normal

Access to wash stations to wash up and sanitizing alcohol

Getting laborers on staff

Social distance

I think construction will get going quickly after the shut down.

Need work

6' spacing, masks, temporal thermometer

More Phases in projects to limit workers and expand completion date

I think it will be business as usual. Hopefully opportunity.

I truly am not sure what our new normal will be, Safety for our employees in my most important and always has been for our company. Not sure that to expect either when the reopening phase starts in our area of the State of PA. Too many uncertainties.

Performing work under new safe ways for both customers and ourselves

Better awareness of PPE in general

Things are definitely going wireless. No more touching or sharing of equipment, of anything really. No more touching bathroom light switches. All businesses will have to have sensors . Locks probably by retinal scans or voice activated. I think a lot of jobs will be replaced by automation or robotics. Driverless cars and trucks. No more handshakes no more hugs or kisses....the poor single people . Thank God I have my beautiful wife.

New normal will be the same as before Covid19 sooner rather than later

Conscious awareness of personal hygiene and sanitation

Testing, Testing, Testing, keeping social distance when possible.

One trade working at one time

Business going bankrupt and very slow start up at best.

Wearing Face Masks and Social Distancing.

Masks, gloves, hand wash stations

Every one wanting something you have no time to do

Not sure

Hopefully just one trade on a project at a time. Otherwise who knows

Less workers and more fear of virus

I think it will all go back to the way it was before.

Tons of PPE, continue social distancing, daily health checks with stretch and flex.

Some social distancing will occur.

Hand washing stations and more trade spacing

Most notable is the market surrounding theme parks, whether their projects will return and the hotels that build around them.

Don't have any idea

I'm not sure. It will be slow and concerning. I believe it will add labor to a project.

Long delays in getting workers to work on a large project with many trades working without knowing what the covid situation is with other workers.

PPE, social distancing.

Fewer qualified candidates

For the foreseeable future, I expect the new normal to consist of temperature checks for employees and questionnaires regarding workers travel when dealing with larger customers.

"Staggered working schedules and/or trade separation through the construction phases

No change

Not sure

I expect a slow restart and struggle for people and businesses to be confident they can spend on needed projects.

Construction in our market unchanged

Fewer people on job sites. Construction deadlines extended.

Next year

Higher implementation of smart features in homes ie: touch free

Nothing in particular, the biggest issue I have had is supply chains can't get as many goods.

Its going to be the same

Masks

Facemasks all the time.

Too soon to know. No one should assume they understand what "normal is or was. Everything in the future will be different than in the past. Let's all be careful not to confuse "normal" and "standards". Standards will need to evolve significantly post peak COVID-19 pandemic.

Slow grow

Proper sanitation procedures. The use of gloves and face masks.

Testing !!!!!

The permitting process

Awareness of people that are sick coming into a place where they can affect others that will lead to mass sharing.

More work for me as I believe many will probably drift away

A place to eat lunch!!!

People more concerned about close proximity.

Get workers

Concerns using shared tools and equipment; Temporary smaller workforce; longer lead times for ordering and receiving materials

Automation and work back logs

I really believe there will not be ANY new normal. Reopening in phases? Who is even going by the 3 phases in reopening? I am partially afraid of what is going to happen.

More distancing. More zoom virtual meetings. More application for automating to rely less on labor. Unknown; will have to ensure the customer will be able to actually have funds

Construction sites in Michigan can open tomorrow. GCs are looking for answers as to what's allowed but are opening sites with a "let's all use a commonsense approach to distancing and etc." Time will tell.

Increased coordination between trades to ensure social distancing is maintained

Lack of work

More distancing on jobs, longer material leadtimes

Social distancing & required face coverings

I expect minimal impact on operations in construction. I do foresee some impact on service and maintenance. Operations will have to include safety for both technicians and occupants. I expect this may extend well into next year.

More training, awareness.

Anticipating a decrease in construction overall, as businesses/investors will be more guarded/conservative with their capital.

Longer schedules

Having to wear mask

Social distancing

No change

Expect it to remain as it was before.

Customers that weren't prepared for any financial emergency. People who lived paycheck to paycheck.

Construction industry will lag for some time after the shutdowns. People will first have other priorities other than construction. Jobless market has to shrink first.

A lot of whining about the rules

PPE, social distance, small crews in all job sites.

Slower projects from distancing and smaller crews. Sometimes only one trade on site.

New normal - face masks and social distancing no sharing tools. Reopening initially will be an adjustment

Nothing will change in Construction. I expect people to be provided or have access to PPE Lots

Keeping the jobsites and employees safe

Some changes in staffing

I think things will get back to normal?

I haven't seen many changes except for some cities not inspecting and some buildings being shut down to contractors

Too early to tell

Heightened awareness of site conditions

Getting reliable help

I expect people to be very cautious about letting contractors in their homes

Better coordination, more project management, PPC reinforced, social distance as possible Current body temperature check on job sites. Disinfecting areas of work progressively. New safety protocols regarding viruses and PPE.

Don't expect noticeable changes in our industry.

Jobs will take longer and cost more than past

We work primarily in the water and wastewater and government sectors so I don't believe I am having the same experience most are. For me I expect things will maybe uptick slightly, there may be a bit more competition attempting to bid this type work for a while as well.

Social distancing

Not really sure

Masks

Lack of consumer confidence

Practicing social distancing and PPE requirements

Order on Line- Expect higher prices

Wireless and touchless switching of receptacles and switches. I expect to have a hard time with scheduling because of all the calls that will need to be filled.

Alternating work schedules for trades to lessen the amount of people working alongside each other Hotel and resort

Better cleaning routines. New tech to keep spaced hygienic.

Will not be able to work very close to others, keep distant

PPE required and work when no one is present in facilities

Social distancing

Not many changes

Waiting on some parts. Waiting on building depts. For plan approval

Just keeping social distancing. More concerned about a year from now how the economy will be????

Face protection at all times

No changes for my industry

None

Wearing mask

I would expect to see an initial rush to satisfy the backlog of work that has grown. I fell that it will slow down as things catch up, but largely it will go back to what it was previously.

No change

We continue with a full staff with only a few projects placed on hold

Social distancing, possibly wearing of face masks, and mandatory hand washing stations that are actually enforced.

Will start off slow. Will be at least a year to regain past volume.

Normal is normal there is no new normal just scare tactics from media

No changes.

I believe it will start out slow with it ramping up to the end of the year. This barring any additional break out.

Redesign of existing projects.

I would expect the safety provisions to be made permanent, but honestly I haven't seen a real commitment to adhering to safe protocol.

Government run electrical construction

No real change

Face masks, gloves and less people per site.

The new normal will be more home based activity for the family

Slow out of the gate. Companies will ramp up but the new normal will definitely be different.

Maintaining social distancing

New normal will be virus free certification of work sites.

Ability to obtain material quickly. Reopening will take quite some time.

Slow start up depending on Covid 19

Less people on worksite and more cleanliness

Awareness of covid symptoms, need for PPE gear to be maintained on the trucks and social distancing when needed

Might refuse jobs that require wearing a mask.

Less people on jobsites

Social distancing will be required.

Until Covid-19 is under control, testing of the workforce for symptoms will be the new norm.

Online ordering and delivery from suppliers. Limitations on the quantity of contractors on project and longer delays on projects,

Until a vaccine is available, it will be much more difficult to complete our projects quickly and safely. I am worried about keeping my troops safe and I am also worried about liability. Cost to operate will increase and I expect push-back.

Lower employee densities; expanded telework capabilities; enhanced HVAC HEPA filtration and airexchanges.

Social distancing and constant cleaning

Less overlap of crews on job sites.

Haven't changed

I work in a very small shop I will have my helper drive separate and I am going to get a mobile hand wash station.

Fewer contractors on a large project to allow distancing

More questions and no answers

I feel everything will go back to normal. Biggest concern would be of a new surge of outbreaks. That

would change everything

Wearing masks and distancing

GC's expecting original completion dates!

Social distancing will be a challenge

Practicing Safe Distancing. While We are on site and working together

Virus reemergence.

Don't know yet

Delays due to supply chain weakness

Watching to make sure there isn't a raise in infections that will cause another shut down.

PPE full time

I expect it to come slowly but get to a point of at least where it was before it happened

Who knows??

Focusing on the health of employees.

Hopefully a gradual climb back to normal-ish

More cleaning of job sites

Hopefully we get back to normal the way things were

Don't know yet

I expect work to ramp up slowly. Companies are worried about payroll not expansion or remodeling. Loans are going to be tougher than before

Having mouth covers when working with others regardless if people are sick.

Keeping safe distance from others and frequent hand washing. More attention on working environment.

There will still be social distancing

Sanitation and social distancing on job sites

Inspection and permitting to be slow

More remote/touch-less devices to install

Not sure

Hand sanitizer, masks, and social distancing.

Sanitizing and PPE supplies for all employees

More sanitary conditions

Same o same o

Project Financing and customer demand.

Personal safety

Less workers on the site with better scheduling. Extension on contracts.

Trouble getting material, Labor shortage, access to projects

People taking things slower

Project delays

I hope things go back to normal shortly. New normal waiting for materials to show at job site and masks

Too soon to determine - future is unknown.

The new normal will include sanitation, housekeeping, signage, PPE to include masks and gloves, onsite temperature testing.

When this is over it will go back to the way it was with a few minor changes

New normal has yet to be determined. There will be more emphasis on clean germ free atmosphere, entering job sites , homes or businesses.

Honestly I don't know how this will affect construction. I would think people will have a higher awareness.

I don't think that it's not going to change much. I agree with the phasing

One trade on site at a time

Contactless communications

Schedules growing longer due to inability to stack trades, resulting in extended General Conditions and margin fade. We also are experiencing PPE costs that were not included, and lack of PPE availability for job sites, driving the manpower shortage as people are turned away without it.

Jobs have stopped people are afraid to come back to work

Cleanliness

Shortage of quality labor. Shortage of labor with social skills. Shortage of labor with high physical fitness

Longer work weeks

The Norm will be contingent upon the severity of recession/ depression

Masks and Social Distancing on Jobsites. Testing of employees at jobsites. New Forms to include Contact Tracing Guidelines

Less crowded work place. Projects taking a bit longer to complete.

I believe things will slowly go back to the way they were pre-COVID in the construction sector. Honestly, I haven't noticed a huge change, but I mostly work on small to medium projects. Most of the GCs I work with were already staggering schedules before covid, in order to keep us from being in each others way. I imagine large projects are going to be more noticeably affected.

Full PPE and social spacing moving into the future. Caution requiring further employee coaching

I don't think anything needs to change. It all depends on politics.

Mainly less crowded job sites which will make work more efficient

Customers concerned about who is entering their property.

More of a use of PPE, more social distancing for the beginning

More hands free systems

There will be more PPE used and hand cleaning stations will be much more prevalent

Labor nervous about covid 19

Social distancing. Less workforce in a specific area. Higher level of intentional clean up and monitoring the health of employees on a site

There will be no "new normal". This is a media term introduced to keep COVID-19 in the news and panicking people.

Reduction/delay in Institutional and commercial projects, serious decline in brick & mortar retail construction & renovations

Very unsure

Projects will take longer if restrictions are enforced

Hopefully we simply return to business as usual.

Longer construction projections

Face masks will always be voluntary PPE now.

Covid19 PPE use and precautions on all jobsites

Wearing a mask and having wash stations on site

More access control, automation and remote work infrastructure

No idea

PPE masks and gloves will be mandatory.

Face masks and daily COVID-19 safety meetings

The new normal will be cleaner and stricter rules on job sites. The reopening phase will include a lot of adjustments.

I believe that there will be more rules and regulations set in place as far as distancing and sanitation. Not as many companies on the job site at the same time.

Distancing, PPE and testing until a vaccine

I can see that time is going to be a factor and completing projects and getting materials Extra PPE

Masks part of the PPE requirements along with glasses and gloves. Temperature checks before entering certain facilities

Different approach as a whole to manpower on sites. Slower progress, more man hours

Continued social distancing

We will have to wait and see

Social distancing of all customers, no more hand shakes.

Social distancing and slower progress

Less labor force on projects

Few men on the job sites. Longer hours

PPE wore at all job sites.

Little change

Caution from customers

Testing, and Questioning risk assessment.

Protocols will change involving social distancing, and job site sanitation as well as remote meetings.

Social distancing

Unknown

Safety from distancing on the jobsites.

Inflation!

I think GCs should. (but not sure if they are patient enough) to give the subcontractors their specific days in on the job sites. And not pile everyone in to work on top of each other. Which this has been the norm. Also gain more respect to custom integrators and why we are so important in the building process. As much or more than the electricians and plumbers.

Distancing common practice. Additional PPE training/certification

Social distancing mostly.

PPE and distancing

New normal is being more pro-active about cleaning job sites.

Less labor, labor allotted windows to specifically perform their work, longer schedules.

PPE social distance. Remote working when possible

All will be back to normal within a year or less.

Wearing face masks all of the time on the job site.

Social distancing measures with more virtual meetings.

Social distancing. Economic up turn.

It will be BUSY

In the short run, there will be a conscious effort by all parties towards social distancing, Covid-19 PPE and a need for most work to be performed in unoccupied spaces. This could be a logistical nightmare for coordination of work and might well result in more second and third shift labor requirements. Homeowners with concerns about our personnel in their homes

None at first. I think some projects like retail may slow down because they were the most hurt financially

Voice control

Jobsite testing and PPE applications. Employee responsible for insuring protocols are complied with. In time we would be back to normal working conditions. I assume masks to be worn at all times. I do not know what to expect.

PPE & reduced close work

More concern for employee protection

1. I hope within 3-6 months after my state opens up completely construction is back as it was prior to COVID-19. 2. Material suppliers are back fully staffed and the supply chain is back to normal.

Stronger PPE Requirements on job sites.

None

Everyone will want it done at the same time.

Distancing

I am not really sure, as there is a wide range of speculation. I do find that most men in the construction field, as long as they aren't working shoulder to shoulder, do not feel a need for protection. But, it will only take one person getting sick to start more precautions. I think there will be a lot of ups/downs, starts/stops as time moves forward. As an employer, I feel responsible for my employees, but not really sure how responsible they expect to be.

Masks

Face masks added to standard PPE requirements.

Smaller teams, less overcrowding

Wearing Masks and Gloves all the time

PPE in force going forward

More concern in the control of virus spread

Longer times to complete projects, counter pickup discouraged from suppliers maybe they will offer curbside or reduced delivery. More PPE and guidelines for safety. I expect the reopening to have a large amount of backlog work to get caught up while companies and workers may begin to change shifts to 4 days per week 10hrs a day to relieve stress.

Social distancing

Social distancing

Projects will take longer.

People will be more careful about how many people in the space

Non contact arrival, no hand shaking

If the economy tanks I expect things to be pretty slow. But I do not expect any changes from the virus itself.

I believe it will get busy very quickly. I hope all the factory's will come back to the USA and we make everything here. I intend to buy Made in the USA

N95 masks to be worn, and wash hands for everyone

Smaller or lesser staffing on projects, with more preparatory work completed offsite.

Slow

No expectations

Not sure

Not following safety procedures as before.

Longer wait time for material.

Higher material and labor costs, Materials manufactured overseas harder to obtain

Slow start, managing people at job sites

Not much has changed for us

Just some delay in projects, wearing masks and practicing social distancing

Not being able to work side by side in a need to fashion. Work will be in high demand for a while Social distancing. I expect that there is a large pent up demand and as long as the economy makes a fast recovery so will the construction industry.

I'm still waiting to find out.

I think it will be required masks for a year or two

Slow pay

Phased reopening. New distancing and sanitation, and PPE considerations.

Need to space out trades and give time for folks to get job done while not being crowded in a room

I expect that we will be busier than we already are.

P and testing

Cleaner more controlled jobsites

New normal will be working within constraints and mitigation processes.

Less close interactions with others on site.

Longer schedules, smaller crew sizes. Material supply to slowly get back up to normal

PPE equipment, social distancing, less personnel on the field

On Site Covid 19 testing and certificates.

More awareness of planning of projects and communication with labor

Construction wasn't affected too much for us. Schools were easier to work at since the children were gone. I am not sure if other business will be more frugal with their money because of re-opening or not, having been shut down for 1-2 months...

A new set of safety standards that have not been written yet

We predict more Healthcare renovations or new construction projects will be in planning soon.

Masks on, temp check, and social distancing.

I would assume we are heading into a depression

Continued fitness for duty precautions until vaccine is in place.

Construction will remain the same

Social distancing. Expectations for hygiene and cleanliness protocols

PPE being worn at all times. Amount of personnel allowed to work together. Hopefully it all works out Covid 19 testing certificates Slow

Most of our construction has stayed the same, some of our jobs will reopen to finish Less people on job sites

I feel it will go back to normal

Distancing from other contactors as well as staggered schedules to minimize contact.

Less men on jobsites

Slow restart to economy. We will still be slow for a few months.

Q19: What types of construction work do you do? Please select all that apply.

Other (please specify):

Multi-family High end residential Electrical contracting Installation and repair Utilities Corrections Mixed use - Multifamily Lighting retrofit programs for energy savings. Hotels AG, Dairy, Irrigation, Power generation Religious; law enforcement **Educational facilities** Training specialist. But I personally do side work in hopes of quitting my job. I answered the questions bases on both jobs. Renewable energy generation and energy storage. Commercial construction Medical office and Dentist offices Retail Panel, service upgrades. Residential lighting. Data center Hotel Institutional Nursing homes Retirement communities, assisted living and long term facilities Aviation High rise residential, high rise hotels, building maintenance Apprentice instructor Railroads Railroad **Dental clinics** Car dealers

Industrial Cannabis installations

- Non-real property electrical and solar
- Medium and high voltage outdoor work as well.

Churches

- Multifamily projects
- Low voltage, telecom, utility
- Generators
- Multihousing
- Senior Centers and Drug/Rehab facilities
- Municipal projects
- Rehab and Long Term Care facilities
- High end residential in New York City.
- Residential new construction. Low voltage systems, Home Automation, Home Theater, Residential, commercial & industrial maintenance.
- Electrical Engineering for many clients.
- Mostly maintenance with some construction/upgrades. Office, warehouses, Industrial etc.
- Apartment maintenance
- Solar
- Retirement facilities
- Condos and multifamily
- Service work, some solar, telecommunications.
- Cruise ships

Q20: In which state are you located?

State	Count
NY	44
СА	43
FL	30
РА	29
NJ	28
ТХ	19
МА	18
IL	17
MI	17
СТ	15
ОН	13

NC	12
КҮ	11
GA	10
WI	10
СО	9
IN	9
МО	9
VA	8
AL	7
MD	7
MN	7
WA	7
IA	6
ID	6
KS	6
ОК	6
OR	6
ME	5
NE	5
TN	5
AZ	4
LA	4
UT	4
AR	3
Н	3
NH	3
NV	3
SC	3

AK	2
ND	2
SD	2
WV	2
DC	1
DE	1
MS	1
NM	1
RI	1
VT	1

Q21: Please feel free to share any additional comments.

Clients are concerned that with their children home from school and older family members at risk due to age and illness ,that I and my work team may bring the plague into their home. Much of my work is residential renovations and service call repair.

I hope the recovery is fast paced

Covid-19 has changed the world we must adjust till this pandemic ends. Two very important areas is testing now followed by cure

Strange new world but we here in America will succeed and overcome this. We are all in this together. Government needs to implement more testing. Make testing available.

l quit

I believe the economy will bounce back next year

Good job thanks

Should be interesting moving forward with all the new rules.

I'm worried that a lot of these tradespeople are not taking covid-19 seriously. Health and wellness of people should not be a political issue. We should do everything we can to protect everyone on the job site.

Thank you. Best wishes to you and our industry through this difficult time.

Thank you for providing us the opportunity to share our thoughts during this pandemic!

We have a back log of work for about two weeks and then who knows. Sales activity has slowed way down

COVID19 has significantly affected construction in Maine. While I am optimistic that the economy will rebound after this clears up, I do think many businesses and homeowners will be thinking differently about how they spend their money. Companies that were planning to expand, are now rethinking it as they have less faith in the economy, locally and globally.

Affordable LED lights with multiple setting have increased sales for customers remodeling.

Thanks! Stay healthy!

God Bless America and all the hardworking people...

Love the Lutron products, I personally prefer them over Leviton... Send me a decal please! Covid-19 will definitely change the way consultant companies work and operate.

New touchless devices are a great opportunity to offer! Putting my sales hat on tomorrow Thank you!

Thanks.

Love all your products CL dimmers, Caseta etc

Covid - 19 didn't kill us but we got hurt by it.

Need more options for outdoor applications, like exterior switches

I think this event will bring about huge changes in infrastructure support to everyone. Evolution further into the digital age. Power generation and storage evolution. This increased digital world needs cleaner power (not clean as in the environment but in power characteristics.

Need better supply abilities

Make America great again!

Another shut down could be bad

I feel lighting control will get stricter in the next few years

I think the term "essential" needs to be redefined

Love your products !

My read on the current work environment, has to do with not contaminating their facilities and homes we come in contact with.

May god protect us all

We will get through this stronger for having done it

We are ready to jump into the world of lighting and shading and go full steam ahead! We already have and see it as a huge opportunity in the near future!

I am most concerned that developers will postpone or cancel projects.

I love Lutron Products!

Looking forward to seeing new technology being rolled out.

Great questions to invoke thinking! I like the idea of hands-free electronics!

I have used Lutron products for the last 40 years and will continue till I retire.

Be safe!

Will need to hire new employees

It will be great when things are back to normal

Just want to get back to normal

More burden put on folks in the field while asking them to work harder with less manpower and more restrictions

Thank you!

Have a large residential wireless lighting project to quote. Need advice

Although times are tough, the construction industry as a whole seems to be sustainable and will hopefully persevere, despite the circumstances.

Thanks!

Note: Due to content some responses have been screened for publishing purposes.

Survey

- * 1. Are you currently continuing to work on projects and job sites?
 - Yes, with no notable changes
 - Yes, with some constraints
 - Mostly, with several constraints
 - Some projects have continued, but many have ceased
 - All projects have ceased

* 2. Have you experienced any unanticipated business opportunities as a result of the coronavirus (COVID-19)?

- A lot
- Some
- None (skip to Q4)

3. During COVID-19, are you experiencing an uptick in any project categories? If so, which categories? Please select all that apply.

- Residential Office
- K-12
- Higher Ed
- Hospitals
- Retail / Restaurant
- Government / Military
- Industrial
- Warehouses
- Outdoor projects
- Other, please specify

* 4. Are you taking on projects now that you wouldn't have accepted before COVID- 19?

- Yes
- No (skip to Q6)
- Not sure (skip to Q6

5. If you are taking on new types of projects, what are your concerns about doing so? Please select all that apply.

- Lack of expertise
- Lack of labor

- Not enough time
- Not sure
- No concerns
- Other (please specify)

*6. Before COVID-19, how often were you asked to provide hands-free or touchless options for lighting controls?

- All the time
- Sometimes
- Rarely
- Never
- Not sure

*7. Now, during COVID-19, how often are you being asked to provide hands-free or touchless options for lighting controls?

- All the time
- Sometimes
- Rarely
- Never
- Not sure

*8. How concerned are you about working in a crowded space with other contractors/laborers?

- Extremely concerned
- Concerned
- Not concerned
- Haven't thought about it

9. Are you doing any of these activities while you are waiting for the economy to get back to normal? Please select all that apply.

- Taking online training courses
- Reading up on my industry
- Planning for the future
- Looking at new markets, sources of income, and services to add to my firm's offerings
- Other (please specify)

10. What has been the effect of COVID-19 on your workforce? Please select all that apply.

- Layoffs
- Furloughs
- No effect
- Not sure

*11. How soon after the restrictions are lifted do you expect to get back to a fully staffed workforce (as before the COVID-19 crisis)?

- 0-3 weeks
- 1-2 months
- 3-4 months
- 5-6 months
- 7-11 months
- A year or more
- Something else, please specify

12. What would you need to be able to get back to full capacity? Please select all that apply.

- Job-site testing for COVID-19
- Access to a supply of PPE such as face masks and gloves
- Certification that shows the site is free of COVID-19 cases
- Social distancing measures to be put in place
- I had to lay off employees, so I need to do some hiring
- I have to call back furloughed employees
- None of the above
- Other (please specify)

13. Once the economy reopens, what will be your biggest challenges? Please select all that apply.

- Not enough work
- Not enough time to finish all the work
- Not enough labor
- Work backlog
- Other (please specify)

14. How do you believe COVID-19 may affect your company?

- I believe my company will grow through COVID-19 and beyond
- I believe my company will stay the same size through COVID-19 and beyond
- I believe my company will shrink a small amount through COVID-19 and beyond
- I believe my company will struggle to survive through COVID-19 and beyond

15. Which skills do you think will be most important post-COVID-19? Please select all that apply.

- Remote servicing
- Ability to get work done with less labor
- Knowing how to implement the latest technological tools
- Troubleshooting over remote connections
- Knowing how to order products remotely
- Not sure
- Other (please specify)

* 16. Have you experienced an effect on your supply chain in terms of completing projects?

- No notable effect on the supply chain from suppliers and manufacturers
- Some effect on the supply chain which has caused minor delays
- Large effect on the supply chain which has caused major delays
- Supply chain disruption has caused projects to stop
- Other (please specify)

17. What do you consider to be the new normal in construction? What do you expect from the reopening phase of these shutdowns?

[Free Response]

*18. Including yourself, how many people work for your company?

- 1-4
- 5-9
- 10-19
- 20-99
- 100 or more

19. What types of construction work do you do? Please select all that apply.

- Residential
- Office
- K-12
- Higher Ed
- Hospitals
- Retail / Restaurant
- Government / Military

- Industrial
- Warehouses
- Outdoor projects
- Other (please specify)

20. In which state are you located?

[Select: State/Province]

21. Please feel free to share any additional comments.

[Free Response]