

ELECTRICAL

POWER & INTEGRATED BUILDING SYSTEMS

2020 PROFILE OF
THE ELECTRICAL
CONTRACTOR

CONTRACTOR



SPECIAL REPORT ON TOOLS
AND EQUIPMENT PURCHASE
AND LEASING

**2020 “ELECTRICAL CONTRACTOR MAGAZINE PROFILE”
DATABASE REPORT**

**ELECTRICAL
CONTRACTORS:
THEIR USE, PURCHASE AND LEASE OF:
CONSTRUCTION SITE TOOLS AND EQUIPMENT
HAND TOOLS
POWER TOOLS
MEASURING TOOLS (INCLUDING DIGITAL)
FISHING TOOLS
PIPE THREADERS/BENDERS/CUTTERS
CABLE PULLERS
AERIAL LIFTS AND SCAFFOLDING
DIGGING/HDD/ BORING EQUIPMENT
CRANES
MOBILE OFFICE SPACE
PORTABLE GENERATORS
TRAILERS (TO HAUL EQUIPMENT)
PERSONAL PROTECTIVE EQUIPMENT/APPAREL
JOB-SITE SAFETY EQUIPMENT
TEMPORARY JOB-SITE LIGHTING**

INCLUDING ESTIMATES BASED ON THE 2018 COUNTY BUSINESS PATTERNS

**A SPECIAL REPORT PREPARED BY
RENAISSANCE RESEARCH & CONSULTING, INC.**

**FOR:
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WASHINGTON, DC 20004**

NOVEMBER 2020

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KEY FINDINGS

This report is volume one of a two-volume report covering different types of tools and equipment as well as use of electronic devices and software. Pages 1 and 2, as well as pages 9 – 24 are common to both reports.

USE, PURCHASE AND RENTAL/LEASE BEHAVIOR OVERVIEW:

Tools and Equipment **Used** in 2019

In 2020, the following 3 tool types were added to the list asked in 2018: Measuring tools (including digital), Fishing tools and 3D printers.

Not surprisingly, as was the case two years ago, many of the top categories mentioned were those that received high levels of purchase and/or rental/lease in previous Profile studies, with about 8 in 10 mentioning: Hand tools, Power tools, Electrical testers, multimeters, Measuring tools and Fishing tools. About 7 in 10 mentioned Phones (including Smartphones, Mobile, Cell, Two-way radios and Push-to-talk phones), Pipe threaders, benders, cutters, Labeling/identification and/or Personal protective equipment (PPE), including apparel and accessories.

Between about 50% and 60% of the firms surveyed said that they or their firm used the following in 2019: Job-site safety equipment, Cable pullers, Portable generators, Tablets or portable reading devices, Software, Aerial lifts/scaffolding, Temporary job-site lighting and/or Trailers (to haul equipment). However, we think that the Software numbers are too low for several reasons:

- The list of software types included only 6 types of software rather than a more expanded list.
- Based on a different series of questions (asked in a Version 8 of the survey), we believe that software usage by electrical contractors is actually closer to 90%. In that question instead of asking the participants about their use of “software”, we asked if the respondents handled each of the 13 tasks “...internally, using a computer”. This was done because we had concerns that the word “software” may be ambiguous to survey participants, for example, if it comes pre-loaded is it viewed as “software”?

Usage of four types of tools and equipment rose significantly compared to 2017: Labeling/identification, Job-site safety equipment, Tablets or portable reading devices, Trailers (to haul equipment/materials). Usage did not decline for any of the types of tools and equipment studied.

In 2019, 90% of electrical contractors say that they made use of multiple types of tools and equipment, statistically unchanged from two years earlier.

Note: In the cases of Digging/HDD/Boring Equipment, Aerial lifts/scaffolding, Cranes and Mobile office space, a somewhat higher percentage of firms said that they had *purchased* and/or *rented/leased* these types of equipment than had reported *using* them. This could be an error in reporting on the part of participants or it could be that these items were acquired in anticipation of their later use, or some combination of the two. Note that we also observed this type of discrepancy two years ago.

Tools and Equipment **Purchased** in 2019

Eight in ten electrical contractors (84%) reported purchasing Tools and Equipment in 2019, statistically unchanged from two years earlier.

Hand tools and Power tools continue to top the list.

- In 2019, purchase of 5 these types of tools and equipment rose from their 2017 levels: Electrical tester, multimeters, etc., LAN, datacom, other low-voltage testing equipment, Aerial lifts/scaffolding, Digging/HDD boring equipment and Drones.
 - In contrast, none of the purchase levels declined compared with two years earlier. All of the remaining types of tools and equipment were statistically unchanged or could not be trended because they were just added in the most recent study.

As was the case in previous Profile studies, in 2019, the bulk of electrical contractors made purchases in *multiple* categories (79% in 2019), statistically unchanged compared with two years earlier.

- However, significantly more companies report making a 2019 purchase in 4 or more and 6 or more categories while significantly fewer report making a purchase in 2-3 categories.
 - This is in contrast to two years earlier when there were no statistically significant differences between 2017 and 2015.

Tools and Equipment **Rented/Leased** in 2019

In 2019, as was the case in 2017, six in ten electrical contractors (60%) *rented/leased* equipment. Note that in 2015 and 2013, the rental/lease rate was substantially and significantly lower -- in the 37% to 40% range.

Nevertheless, as has been the case in recent Profile studies, fewer electrical contractors continue to obtain tools and equipment through rental/lease (60%) than through outright purchase (84%).

As was also the case two years ago, in addition to Aerial lifts/scaffolding and Digging/HDD/boring equipment, Cranes and Mobile office space (trailers) are the only four categories that are more likely to be obtained through rental/lease than through purchase.

Of these four categories, only Cranes posted an increase among the total sample in rental/lease. The other three categories were unchanged compared with two years earlier. None of the types of tools and equipment studied posted a decline in rental/lease compared with two years earlier.

- In addition, rental/lease of Power tools has also increased compared to two years earlier.
- Among the total sample, almost one half (46%) of electrical contractors rented or leased in multiple categories. This is statistically unchanged from two years earlier. Not surprisingly, rental/lease “Any”, and in multiple categories is higher among larger firms and/or among firms that work primarily on CII rather than residential projects.

KEY FINDINGS: TOOLS

Hand Tools

74% of respondent firms made a purchase in the Hand tools category in 2019, statistically unchanged compared with 2017. 6% said that their firm obtained Hand tools through rental/lease, also statistically unchanged compared with two years earlier.

In 2019, there were no subgroup differences by number of employees in terms of purchase or rental/lease. Firms that work primarily on CII projects are significantly more likely to report hand tool purchases, compared with firms that work primarily on residential projects. However, there is no difference by primary type of construction activity on the rental/lease of hand tools.

Power Tools

68% of electrical contracting firms reported making a 2019 purchase of Power tools. This purchase level is statistically unchanged from the 2017 purchase level of 66%. 12% of electrical contractors reported renting or leasing Power tools in 2019. This is a statistically significant increase versus two years earlier and is significantly higher than any level since 2013.

- Purchase: In 2019, larger firms (10+ employees) and firms that work primarily on CII projects were significantly more likely to report making a 2019 Power tools purchase compared with firms with 1-9 employees and/or firms who work primarily on residential projects.
- Rental/Lease: In 2019, firms that work primarily on CII are also more likely than firms that work primarily on residential construction to obtain Power tools through rental or lease. However, there was no difference in rental or lease of Power tools by number of employees.

Measuring Tools (Including Digital)

49% of electrical contracting firms purchased Measuring tools (including digital) in 2019; 1.75% rented or leased in this category in 2019.

- Purchase levels are significantly higher among firms that work primarily on CII projects. However, there is no difference by number of employees.
- Rental/lease levels: Although at low levels, rental/lease levels are higher among firms with 10+ employees and/or those that work primarily on CII projects.

Fishing Tools

46% of electrical contracting firms purchased Fishing tools in 2019; 2.5% rented or leased in this category in 2019.

- Purchase levels are significantly higher among firms that work primarily on CII projects. However, there is no difference by number of employees.
- Rental/lease levels: There are no statistically significant differences by number of employees or by primary type of construction.

Pipe Threaders, Benders and Cutters

35% of electrical contracting firms purchased Pipe threaders/benders/cutters in 2019. The percentage difference compared with two years earlier, when it was 28%, is just short of statistical significance.

5.9% said that their firm obtained Pipe threaders/benders/cutters through rental/lease, which is statistically unchanged compared with two years earlier.

- In 2019, larger firms and/or those who work primarily on CII projects are far more likely to *purchase* Pipe threaders/benders/cutters compared with smaller firms and/or those that work primarily on residential projects.
- In 2019, firms that work primarily on CII projects are also more likely than firms that work primarily on residential projects to have obtained Pipe threaders/benders/cutters through *rental/lease*. However, there is no difference by number of employees in terms of 2019 rental/lease likelihood.

Cable Pullers

25% of electrical contracting firms purchased Cable pullers in 2019, which is statistically unchanged vs. the 2017 level of 19%. The percentage of electrical contracting firms renting/leasing, at 8%, is also statistically unchanged compared with two years ago.

- Larger firms and/or those that work primarily on CII projects are significantly more likely to have obtained Cable pullers in the previous year by *purchase* compared with smaller firms and/or those that work primarily on residential projects.
- Larger firms are also more likely than smaller firms to have obtained Cable pullers through rental/lease compared with smaller firms. However, in 2019, there was no difference in the likelihood to rental or lease Cable pullers by the primary type of work performed.

KEY FINDINGS: CONSTRUCTION SITE EQUIPMENT

Overview: Construction Site Equipment is one of the few categories where some equipment is more likely to be obtained through *rental/lease* rather than through *purchase*. In fact, far more electrical contracting firms continue to obtain Aerial lifts/scaffolding, Digging/HDD/boring equipment, and Cranes through *rental/lease* than through *purchase*.

- In contrast, however, Personal protective equipment, Job-site safety equipment and Temporary jobsite lighting are far more likely to be purchased rather than rented/leased.
- In all other cases – Mobile office space (trailers), Trailers to haul equipment/materials and Portable generators – the difference between renting/lease and purchase is less than 10 percentage points

Aerial Lifts/Scaffolding Rental/Lease and Purchase Behavior

In 2019, 45% of firms obtained Aerial lifts/scaffolding through *rental/lease* and 11% through *purchase*.

- Lease/Rental: The percentage *renting or leasing* Aerial lifts/scaffolding held steady compared with two years earlier.
- Purchase: In contrast to the rental/lease results, the percentage making a *purchase* in 2019 increased significantly from 2017, returning to its 2015 level. This is the first time that purchase levels rose since 2013.
 - Not surprisingly, larger firms are far more likely than their smaller counterparts to have acquired Aerial Lifts/scaffolding through either rental/lease or through purchase. In addition, firms working primarily on CII projects are more likely to have rented/leased Aerial lifts/scaffolding compared with firms that work primarily on residential projects.

Digging/HDD/Boring Equipment

In 2019, 34% of electrical contracting firms obtained Digging/HDD/boring equipment through *rental/lease* and 8.5% through *purchase*.

- Compared with two years earlier, rental/lease levels are statistically unchanged while the percentage that purchased Digging/HDD/boring equipment doubled to 8.5% from 4.2%, a statistically significant increase.
 - Rental/Lease: Firms that work primarily on CII projects are more likely than those that work primarily on residential projects to rent/lease Digging/HDD/boring equipment. However, there is no difference by firm size.
 - Purchase: Larger electrical contracting firms and/or those that work primarily on CII projects are more likely than smaller electrical contracting firms and/or those that work primarily on residential projects to purchase Digging/HDD/boring equipment.

Cranes Rental/Lease and Purchase Behavior

25% of electrical contractors obtained Cranes in 2019 through *rental/lease* and 2.5% through *purchase*.

- The percentage of electrical contractors who obtain Cranes through *rental/lease* rose significantly from 17% in 2017, which itself represents a dramatic and significant rise from the 2015 level of 6.5%.
- However, the percentage making a *purchase*, at 2.5 % is statistically unchanged compared with two years and four years earlier.

Cranes are far more likely to be rented/leased by larger firms and/or firms working primarily on CII projects than by smaller firms and/or firms working primarily on residential projects.

The same holds true for purchase. Cranes are far more likely to be purchased by larger firms and/or firms working primarily on CII projects than by smaller firms and/or those working primarily on residential projects.

Mobile Office Space

14% of electrical contractors obtained Mobile office space (trailers) in 2019 through *rental/lease* and 4.7% through *purchase*. The levels of rental/lease and purchase are each statistically unchanged compared to two years earlier. .

Mobile office space (trailers) is more likely to have been obtained in 2019 by larger firms and/or firms working primarily on CII projects than by smaller firms and/or firms working primarily on residential projects. This is the case for both rental/lease and purchase.

Continues on the next page...

In the next two sections -- Portable generators and Trailers (to haul equipment/materials) – the percentages obtaining through *purchase* and *rental/lease* are more comparable to each other than is the case with other types of job site equipment.

Portable Generators

19% of electrical contracting firms *purchased* Portable generators in 2019, statistically unchanged from the 2017 results. 13% obtained Portable generators through *rental/lease*, also statistically unchanged compared to two year earlier.

Of the categories where rental/lease plays at least a non-negligible role, this is the first job site category in this report where the level of purchase appears to be comparable to the level of rental/lease.

Larger firms and/or those that work primarily on CII projects are significantly more likely than smaller firms and/or those that work primarily on residential projects to have made a purchase or rental/lease in this category.

Trailers (to Haul Equipment)

This is the second of the two categories where rental/lease plays at least a non-negligible role, and where the level of purchase is actually higher than the level of rental/lease.

17% of electrical contracting firms *purchased* Trailers (to haul equipment/materials) in 2019. This is statistically unchanged from the level observed in 2017.

9% *rented or leased* Trailers (to haul equipment/materials) in 2019, also statistically unchanged compared with 2017 results.

Purchase levels are higher among firms with 10+ employees and/or among firms working primarily on CII projects.

There are no statistically significant differences in *rental/lease* levels by number of employees or by the primary type of work performed.

In the remaining sections – Personal protective equipment, Job-site safety equipment, and Temporary job-site lighting -- purchase plays a much more dominant role than does rental/lease.

Personal Protective Equipment/Apparel

43% of electrical contracting firms reported a 2019 *purchase* of Personal protective equipment, including apparel and accessories, statistically unchanged compared with 2017.

Only 3.4% of electrical contracting firms *rented/leased* in this category; also statistically unchanged from the levels observed in 2017.

Purchase levels are higher among larger companies and/or firms that work primarily on CII construction rather than for smaller firms and/or those that primarily work on residential construction.

Rental/lease, although at a low level among the total sample, is nevertheless significantly higher among firms with 10+ employees and/or those that work primarily on CII projects.

Job-site Safety Equipment

34% of electrical contracting firms reported a 2019 purchase of Job-site safety equipment. 7% obtained Job-site safety equipment through rental/lease. Both purchase levels and levels of rental/lease are statistically unchanged compared with two years earlier.

In 2019, *purchase* levels were higher among larger companies and/or companies that work primarily on CII projects compared with companies that have 1-9 employees and/or that work primarily on residential projects for Job-site safety equipment.

In 2019, larger companies were more likely to *rent/lease* Job-site safety equipment, however there were no differences by primary type of work.

Temporary Job-site Lighting Purchase and Rental/Lease Behavior

26% of electrical contracting firms purchased Temporary job-site lighting in 2019, which is statistically unchanged from the 23% which was measured two years earlier. 4.7% rented or leased in this category in 2019, which is also statistically unchanged from two years earlier.

Both *Purchase* levels and *rental/lease* levels are significantly higher among larger electrical contracting firms and/or among those that work primarily on CII projects.

METHODOLOGY

This report focuses on electrical contractors' use, purchase, rental/lease for hand tools and power tools and construction site equipment. In 2020, three new categories were included. They are: Measuring tools (including digital), Fishing tools and 3D printers. Please note that the Profile study is conducted in even years (2018 or 2016) and asks about the previous year (2019 or 2017).

The survey was conducted by internet and postal mail among a random sample of ELECTRICAL CONTRACTOR subscribers. In addition, in 2020 as in 2018, about 100 members of the ELECTRICAL CONTRACTOR Subscriber Research Panel also participated in the survey. The field period for the survey began on February 21, 2020 and ran through April 13, 2020, which was the deadline for the July 2020 article. A total of 1635 completed the survey during that time period.

In 2020, we offered those in the mail sample a choice of either participating in the survey online, through a link, or to continue to receive a paper survey by postal mail. A total of 144 completed the survey by mail and another 53 completed the survey online.

The data were not weighted for two reasons – since the proportion of the total attributable to the print list was so low, weighting would distort the total statistics. The other reason was that comparing the unweighted 2020 results with the 2018 weighted results showed very little difference among the total sample.

Each respondent who received the survey through the internet was sent up to four follow-up emails. However, follow-up mailings were not made to nonresponders in the postal mail sample. An incentive was offered for participation in the survey: For each completed survey, ELECTRICAL CONTRACTOR would contribute \$5 to charity, up to a total of \$10,000. In addition, as was the case in 2018, the magazine also offered a sweepstakes drawing for one of five \$150 Amazon e-gift cards.

The internet option was first introduced in 2004.

As was the case since 2004, the survey was produced in different versions. Starting with the 2008 Profile study, there were four versions of the survey, which differed from each other on fewer than 10 questions. The first 3 pages were common to all versions while the differences among the versions occurred on the last page. The major difference was that in the Internet portion respondents were *required* in almost all cases to have percentage questions add to 100%.

This report and its companion report are drawn from Versions 3 – tools and equipment used, purchased, rented/leased and from Version 8 – business activities conducted in-house, using a computer – and use/ownership and planned acquisition of electronic devices. The base sizes of those version are as follows: Version 3 has a base size of 236 and Version 8 has a base size of 232.

As in the past, statistical testing was done at the 90% level of confidence.

This research was conducted by New York, NY-based Renaissance Research & Consulting, Inc. (www.renaiss.com), an independent marketing research firm that has, as one of its specialties, market research for the construction industry.

DETAILED FINDINGS

Tools and Equipment Use, Purchase and Rental/Lease Overview

Tools and Equipment Used in 2019

In the 2020 Profile study, electrical contractors were asked to indicate which of 30 types of tools and equipment they or their firm **used** in the *previous* year.

In 2020, the following three tool types were added to the list asked in the 2018 Profile study: Measuring tools (including digital), Fishing tools and 3D printers.

Not surprisingly, as was the case two years ago, many of the top categories mentioned were those that received high levels of purchase and/or rental/lease in previous Profile Studies, with about 8 in 10 mentioning: Hand tools, Power tools, Electrical testers, multimeters, Measuring tools and/or Fishing tools. About 7 in 10 mentioned Phones (including Smartphones, Mobile, Cell, Two-way radios and Push-to-talk phones), Pipe threaders, benders, cutters, Labeling/identification and/or Personal protective equipment (PPE), including apparel and accessories.

Between about 50% and 60% of the firms surveyed said that they or their firm used the following in 2019: Job-site safety equipment, Cable pullers, Portable generators, Tablets or portable reading devices, Software*, Aerial lifts/scaffolding, Temporary job-site lighting, and/or Trailers (to haul equipment).

About one-third mentioned LAN, teledata, low voltage meters, Digging/HDD/boring equipment** and/or Thermal imaging.

15 percent or fewer mentioned: Thermal imaging, Mobile office space (trailers), Cranes, 3D scanner, Drones, and/or 3D printers.

The table follows on the next page.

Usage of four types of tools and equipment rose significantly compared to 2017: Labeling/identification, Job-site safety equipment, Tablets or portable reading devices, and/or Trailers (to haul equipment/materials). Usage did not decline for any of the types of tools and equipment studied.

*Based on a different series of questions (asked in a Version 8 of the survey), we believe that software usage by electrical contractors is actually closer to 90%. Instead of asking the participants about their use of “software”, we asked if the respondents handled each of the 13 tasks “...internally, using a computer”. This was done because we had concerns that the word “software” may be ambiguous to survey participants, for example, if it comes pre-loaded is it viewed as “software”?

**Note: In the cases of Digging/HDD/boring equipment, Aerial lifts/scaffolding, Cranes and Mobile office space, a somewhat higher percentage of firms said that they had *purchased* and/or *rented/leased* these types of equipment than had reported *using* them. This could be an error in reporting on the part of participants or it could be that these items were acquired in anticipation of their later use, or some combination of the two. Note that we also observed this type of discrepancy two year ago.

Tools and Equipment <u>Used</u>	Total 2019		Total 2017
	(236)		(234)
	%		%
“Any”	90		91
Hand tools	81		82
Power tools	79		82
Electrical testers, multimeters, etc.	78		80
Measuring tools (including digital)	78		N/A
Fishing tools	76		N/A
Phones: smart/mobile/cell or two-way radios/push-to-talk	71		71
Pipe Threaders, benders, cutters	70		71
Labeling/identification (cable/panel)	67	>	55
Personal protective equipment, including apparel and accessories	65		59
Job-site safety equipment	58	>	45
Cable pullers	54		53
Portable generators	51		46
Tablets or portable reading devices	51	>	42
Software (e.g. CAD, estimating, procurement, etc.)	50		45
Aerial lifts/scaffolding	49		52
Temporary job-site lighting	48		48
Trailers (to haul equipment/materials)	46	>	39
LAN, datacom, other low-voltage	37		34
Digging/HDD/boring equipment	33		26
Thermal imaging	32		26
Mobile office space (trailers)	14		13
Cranes	14		11
3D scanner	8		5
Drones	8		5
3D printer	8		N/A
Estimating	36		36
Project management	23		22
CAD	24		22
Scheduling sales and service	21		22
Tool and inventory control	21		19
BIM	16		11

Here is a comparison of software usage when asked in two different ways – by showing a list of 6 types of software and asking if it was used in 2019 or, based on a different series of questions (asked in a different version of the survey). That is, instead of asking the participants about their use of “software”, we asked if the respondents handled each of the 13 tasks “...internally, using a computer”. This was done because we had concerns that the word “software” may be ambiguous to survey participants, for example, if it comes pre-loaded is it viewed as “software”.

Based on the latter way of asking the question on software use and showing a longer list of 13 rather than 6, we believe that software usage by electrical contractors is closer to 90%.

	Task Handled Internally, Using a Computer (V8)	Software Used in 2019 (V3)	Difference
	(232)	(236)	
	%	%	
<u>ANY</u>	<u>86</u>	<u>50</u>	
Accounting/Payroll	64		
Estimating	68	36	+32
Job Cost Control/Analysis	59		
CAD	33	24	+9
Take-Off	51		
Project Management	53	23	+30
Time and Attendance Software	53		
Tool/Equipment Inventory Control	33	21	+12
Scheduling Service Work/Logistics	53	21	+32
Fleet Management/Vehicle Locator	28		
BIM (Building Information Modeling)	22	16	+6
Project Collaboration Software	35		
Productivity Software	58		

In this section we are returning to the full list of 30 types of tools and equipment, rather than focusing solely on software. Note that the vast majority of electrical contracting firms make *use* of **multiple** types of tools and equipment, about 90% across the total sample.

- While reported use of 2-3 types of tools is higher among firms with 1-9 employees compared with firms with 10+ employees, there is no difference by company size in use of 4 or more types of tools and equipment.
- The main finding by primary type of work performed is that firms that work primarily on CII projects are significantly more likely to make use of 6 or more types of tools and equipment compared with firms that work primarily on residential projects (89% vs. 75%). Perhaps more important is the high percentage of smaller firms and firms that work primarily on residential construction that make use of 6 or more types of tools and equipment.

	Use in Multiple Categories in 2019					
		Number of Employees			Work Primarily In	
	Total	1-9	10+		Residential	CII
	(236)	(150)	(85)		(84)	(116)
	%	%	%		%	%
Any Use	<u>90</u>	<u>93</u>	<u>86</u>		<u>89</u>	<u>91</u>
Use Only 1 Category	1	1	0		1	1
Use in Multiple Categories	<u>89</u>	<u>91</u>	<u>86</u>		<u>88</u>	<u>91</u>
Use in 2 – 3 Categories	3	5 >	0		7 >	1
Use in 4+ Categories	<u>86</u>	<u>87</u>	<u>86</u>		<u>81</u>	<u>90</u>
Use in 4 – 5 Categories	3	3	1		6 >	1
Use in 6+ Categories	84	83	85		75	< 89

2017 is shown below for comparison. Note that in 2017, but not in 2019, firms with 10+ employees were significantly more likely to use 6+ types of tools and equipment. Firms that work primarily on CII projects were and are more likely to make use of 6 or more types of tools and equipment.

	Use in Multiple Categories in 2017					
		Number of Employees			Work Primarily In	
	Total	1-9	10+		Residential	CII
	(234)	(162)	(71)		(81)	(107)
	%	%	%		%	%
Any Use	<u>91</u>	<u>90</u>	<u>93</u>		<u>91</u>	<u>93</u>
Use Only 1 Category	1	2 >	0		1	2
Use in Multiple Categories	<u>90</u>	<u>88</u>	<u>93</u>		<u>90</u>	<u>90</u>
Use in 2 – 3 Categories	5	6	5		6	5
Use in 4+ Categories	<u>84</u>	<u>83</u>	<u>88</u>		<u>84</u>	<u>85</u>
Use in 4 – 5 Categories	7	10 >	1		13 >	3
Use in 6+ Categories	78	73	< 86		71	< 82

Percent That Purchase Different Types of Tools and Equipment

About eight in ten electrical contractors (84%) reported purchasing tools and equipment in 2019, statistically unchanged from two years earlier.

Hand tools and Power tools continue to top the list.

- In 2019, purchase of 5 these types of tools and equipment rose from their 2017 levels: Electrical testers, multimeters, etc., LAN, datacom, other low-voltage testing equipment, Aerial lifts/scaffolding, Digging/HDD boring equipment and Drones.
 - In contrast, none of the purchase levels declined compared with two years earlier. All of the remaining types of tools and equipment were statistically unchanged or could not be trended because they were just added in the most recent study.
- These categories are statistically unchanged compared with two years earlier: Hand tools, Power tools, Personal protective equipment (PPE) including apparel and accessories, Phones, Labeling/identification (cable/panel), Pipe threaders, benders, cutters, Job-site safety equipment, Tablets or portable reading devices, Temporary job-site lighting, Cable pullers, Portable generators, Trailers (to haul equipment/materials), Thermal imaging, Mobile office space (trailers), 3D scanners and Cranes.
- Measuring tools (including digital), Fishing tools and 3D printers were added in 2019 and cannot be trended

PURCHASE OF TOOLS AND EQUIPMENT									
	In 2019		In 2017		In 2015		In 2013		In 2011
	Total		Total		Total		Total		Total
	(236)		(234)		(376)		(374)		(234)
	%		%		%		%		%
“Any” Purchase ...	84	=	81	>	79	<	84	>	77
Hand tools	74	=	70	=	70	<	77	>	69
Power tools	68	=	66	=	70	=	72	>	64
Electrical testers, multimeters, etc.	55	>	45	=	46	<	60	>	47
Measuring tools (including digital) (first asked in 2020 Profile Study)	49		N/A		N/A		N/A		N/A
Fishing tools (first asked in 2020 Profile Study)	46		N/A		N/A		N/A		N/A
Personal protective equipment, including apparel and accessories	43	=	42	>	31	<	44	=	41
Phones: smart/mobile/cell or two-way radios/push-to-talk	43	=	37	=	37	<	47	=	42
Labeling/identification (cable/panel)	36	=	34	>	22	<	33	=	27
Pipe Threaders, benders, cutters	35	=	28	>	22	<	28	=	25
Job-site safety equipment	34	=	28	=	26	<	32	=	28
Tablets or portable reading devices	31	=	24	>	16	<	22	>	10
Temporary job-site lighting (first asked in 2016)	26	=	23	>	15		N/A		N/A
Cable pullers (first asked in 2014 Profile Study)	25	=	19	>	10	<	14		N/A
Software (e.g. CAD, estimating, procurement, etc.) ¹	23	>	15	=	16	<	21	=	16
LAN, datacom, other low-voltage	22	>	14	>	9	<	16	=	12
Portable generators (first asked in 2016 Profile Study)	19	=	16	=	19		N/A		N/A
Trailers (to haul equipment/materials) (first asked in 2016)	17	=	12	=	9		N/A		N/A
Thermal imaging (first asked in 2014 Profile Study)	12	=	10	=	8	=	10		
Aerial lifts/scaffolding	11	>	6	<	10	<	16	=	13
Digging/HDD/boring equipment	9	>	4	=	7	=	9	=	9
Mobile office space (trailers) (first asked in 2016 Profile Study)	5	=	3	=	4		N/A		N/A
3D scanner (first asked in 2018 Profile Study)	5	=	2		N/A		N/A		N/A
Drones (first asked in 2018 Profile Study)	5	>	2		N/A		N/A		N/A
3D printer (first asked in 2020 Profile Study)	4		N/A		N/A		N/A		N/A
Cranes (first asked in 2016 Profile Study)	3	=	1		2		N/A		N/A

Bolded numbers denote and arrows significant differences at the 90% level of confidence

¹ See additional discussion on the next page

The perceived increase in software purchase is, in part, an artifact of the higher percentage of electrical contractors who took the survey on the Internet in 2020 compared with 2018. Specifically, when we compare the two Internet samples, the increase goes away.

Software Purchased in 2019	2019		2017		2019		2017
	Total		Total		Internet Sample		Internet Sample
	(236)		(234)		(218)		(131)
	%		%		%		%
Software	23	>	15		24	=	19
Estimating	15		10		16		14
CAD	12	>	6		13	=	10
BIM	9	>	4		9	=	5
Tool and inventory control	9	>	5		10	=	7
Project management	9		7		10		8
Scheduling sales and service	8		7		9		9

Purchase and rental were not asked in V8 and therefore cannot be shown for comparison here.

Purchase in Multiple Categories

As has been the case in earlier Profile studies, in 2019, the bulk of electrical contractors made purchases in *multiple* categories (79% in 2019), statistically unchanged compared to two years ago.

- However, significantly more companies report making a 2019 purchase in 4 or more and 6 or more categories while significantly fewer report making a purchase in 2-3 categories.
- This is in contrast to two years earlier when there were no statistically significant differences between 2017 and 2015.

PURCHASE IN MULTIPLE CATEGORIES									
	In 2019		In 2017		In 2015		In 2013		In 2011
	Total		Total		Total		Total		Total
	(236)		(234)		(376)		(374)		(234)
	%		%		%		%		%
Any Purchase	84	=	81	=	79	<	84	>	<u>77</u>
Purchased Only 1 Category	5	=	6	=	5	=	3		5
Purchase in Multiple (2+) Categories	79	=	75	=	74	<	81	>	<u>72</u>
Purchased in 2 – 3 Categories	13	<	22	=	21	=	20		17
Purchase in 4+ Categories	66	>	<u>53</u>	=	<u>53</u>	<	<u>61</u>		<u>55</u>
Purchased in 4 – 5 Categories	13	=	16	=	18	=	19		24
Purchased in 6+ Categories	53	>	37	=	35	<	42	>	31

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Purchase in Multiple Categories, continued

By number of employees: Those in smaller firms were significantly more likely to have purchased in only 1 category, in 2-3 categories or in 4-5 categories, while those in larger firms are significantly more likely to have purchased in 6+ categories

By primary type of work: Firms that work primarily in CII construction are significantly more likely than those who work primarily on residential projects to have made purchases at all (“Any”) and to have made purchases in multiple categories, particularly in 2+, 4+ and 6+ categories.

- Firms that work on primarily residential projects are more likely to have made purchases in 4-5 categories, while firms working primarily on CII projects are significantly more likely to have made purchases in 6+ categories.

	PURCHASE IN MULTIPLE CATEGORIES (2019)					
		Number of Employees			Work Primarily In	
		1-9	10+		Residential	CII
	(236)	(150)	(85)		(84)	(116)
	%	%	%		%	%
“Any” Purchase	84	83	87		76	<91
Purchased Only 1 Category	5	7 >	1		5	5
Purchase in Multiple (2+) Categories	79	75	86		71	< 85
Purchased in 2 – 3 Categories	13	18 >	5		14	12
Purchase in 4+ Categories	66	57	< 81		57	< 73
Purchased in 4 – 5 Categories	13	15 >	8		25 >	4
Purchased in 6+ Categories	53	42	< 73		32	< 69

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Trended Results

There are a few statistically significant differences between 2019 and 2017 in the table shown below.

- Among the total sample, there was a statistically significant drop in the percentage of firms that purchased 2-3 categories while there was a statistically significant increase in the percentage of firms that purchased 4+ and 6+ categories.
- Smaller firms tracked the total sample. Among firms with 1-9 employees, compared with two years earlier: significantly fewer firms made purchases in 2-3 categories while there was a statistically significant increase in smaller firms making purchases in 4+ and 6+ categories.
- However, in contrast to two years earlier, there were no statistically significant differences in purchase levels among firms with 10+ employees.

PURCHASE in MULTIPLE CATEGORIES (By Firm Size)														
	Total Sample					1-9 Employees					10+ Employees			
	2019	2017	2015	2013		2019	2017	2015	2013		2019	2017	2015	2013
	(236)	(234)	(376)	(374)		(150)	(162)	(278)	(282)		(85)	(71)	(98)	(91)
	%	%	%	%		%	%	%	%		%	%	%	%
<u>Any Purchase</u>	84	81	<u>79</u>	< 84		83	78 =	<u>81</u>	< 87		87	87 >	<u>74</u>	78
Only 1 Category	5	6	5	3		7	9 =	5	4		1	0 =	3 >	0
<u>In Multiple Categories</u>	79	<u>75</u>	<u>74</u>	< 81		75	69 =	<u>75</u>	< 83		86	87 >	<u>71</u> =	<u>78</u>
In 2 – 3 Categories	13	< 22	21	20		18	< 27 =	25	25		5	10	10	8
<u>In 4+ Categories</u>	66 >	<u>53</u>	<u>53</u>	< 61		57 >	42	< 51	<u>58</u>		81	77 >	<u>61</u> =	<u>70</u>
In 4 – 5 Categories	13	16	18	19		15	18 =	21	24		8	11	10 =	5
In 6+ Categories	53 >	37	35	< 42		42 >	24 =	30	34		73	66 >	51	< 65

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Percent That Rent/Lease Different Types of Tools and Equipment

In 2019, as was the case in 2017, six in ten electrical contractors (60%) *rented/leased* equipment. Note that in 2015 and 2013, the rental/lease rate was substantially and significantly lower -- in the 37% to 40% range.

Nevertheless, as has been the case in recent Profile studies, fewer electrical contractors continue to obtain tools and equipment through rental/lease (60%)² than through outright purchase (84%).

Aerial Lifts/scaffolding and Digging/HDD/boring equipment continue to be the two categories that are obtained through rental/lease most often. Both are statistically unchanged compared to two years earlier.

- Compared with two years earlier, rental/lease levels increased significantly only for two categories -- Cranes (the third most leased category) and Power tools, and for one type of software -- Estimating software (shown on the following page). In the case of rental/lease of Estimating software, the increase holds even when we compare the Internet samples in 2020 to that of 2018.
 - Note that in the case of Cranes, first introduced in the 2016 Profile Study -- rental/lease also increased between 2015 and 2017.

Rental/lease levels did not decline for any of the types of tools and equipment studied between 2019 and 2017.

² The 2020 list included three new categories -- 3D printers, Fishing tools and Measuring tools (including digital)-- but the level of rental/ lease was low. In fact the net without those three new categories was 59%. That is, we do not believe that the new categories had much of an effect on the 60% net.

RENTAL/LEASE OF TOOLS AND EQUIPMENT						
	In 2019		In 2017		In 2015	In 2013
	Total		Total		Total	Total
	(236)		(234)		(376)	(374)
	%		%		%	%
“Any” Lease/Rental...	60	=	57	>	37	40
Aerial lifts/scaffolding	45	=	46	>	28	29
Digging/HDD/boring equipment	34	=	28	>	12	= 16
Cranes	25	>	17	>	6	N/A
Mobile office space (trailers)	14	=	12	>	6	N/A
Portable generators	13	=	11	>	4	N/A
Power Tools	12	>	8	>	4	< 7
Trailers (to haul equipment/materials)	9	=	8	>	3	N/A
Cable pullers	8	=	8	>	3	4
Job-site safety equipment	7	=	6	>	1	4
Pipe threaders, benders, cutters	6	=	5	>	2	5
Hand tools	6	=	4	=	2	< 5
Thermal imaging	5	=	4	>	1	< 3
Temporary job-site lighting	5	=	4	=	2	N/A
Software	4.2	=	2.6	>	0.9	1
Electrical testers, multimeters, etc.	3	=	4	=	2	3
Phones: smart/mobile/cell or two-way radios/push-to-talk	3	=	3	>	0.8	< 3
Personal protective equipment, including apparel and accessories	3	=	2	=	0.6	1
Fishing tools	3		N/A		N/A	N/A
LAN, datacom, other low-voltage	2	=	2.8	>	0.6	1
3D scanner	2	=	1.6		N/A	N/A
Measuring tools (including digital)	2		N/A		N/A	N/A
3D printer	2		N/A		N/A	N/A
Tablets	1.7	=	0.4	=	1	1
Drones	1.7	=	0.4		N/A	N/A
Labeling/identification (cable/panel)	1.3	=	0.4	=	0.6	1
Estimating ³	2.5	>	0.5			
CAD	2		2			
BIM	2		1			
Tool and inventory control	0.8		0.5			
Project management	0.8		0.5			
Scheduling sales and service	0.8		0.9			

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow

³ This difference holds up even when the Internet sample in 2019 is compared with Internet sample in 2017.

Rental/Lease in Multiple Categories

Among the total sample, 46% of electrical contractors rented/leased in two or more categories, statistically unchanged from the 41% observed two years ago.

RENTAL/LEASE IN MULTIPLE CATEGORIES						
	2019		2017		2015	2013
	(236)		(234)		(376)	(374)
	%		%		%	%
Any Lease/Rental	<u>60</u>	=	<u>57</u>	>	<u>37</u>	<u>40</u>
Only 1 Category	14	=	16	=	18	21
Lease/Rent in Multiple/2+ Categories	<u>46</u>	=	<u>41</u>	>	<u>19</u>	<u>19</u>
In 2 Categories	<u>13</u>	=	<u>14</u>	>	8	10
In 3+ Categories	<u>33</u>	=	<u>27</u>	>	11	9

- As was the case two years ago, larger electrical contracting companies are more likely than smaller electrical contractors to have leased/rented tools and equipment at all (“any”) and also in the multiple categories of 2+ and 3+ types of tools and equipment.
- As was also the case two years ago, a higher percentage of firms that work primarily on CII projects have rented/leased at all (“any”) and in the multiple categories of 2+ and 3+ types of tools and equipment compared with firms working primarily on residential projects.
 - As noted in the past, we believe that this is due to the larger companies being more involved in larger, more complex and sophisticated projects that require *more different types* of tools and equipment.
- Note that 25% of the smaller companies (those with 1-9 employees) rented/leased in 3+ categories compared to 49% of firms with 10+ employees.

	In 2019				
		Number of Employees		Work Primarily In	
	Total	1-9	10+	Residential	CII
	(236)	(150)	(85)	(84)	(116)
	%	%	%	%	%
Any Lease/Rental	<u>60</u>	51	< 75	<u>41</u>	< 76
Only 1 Category	14	15	12	10	16
Lease/Rent in Multiple /2+ Categories	<u>46</u>	<u>37</u>	< 64	31	< 60
In 2 Categories	<u>13</u>	<u>12</u>	14	17	10
In 3+ Categories	<u>33</u>	25	< 49	14	< 50

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow

Lease/Rental in Multiple Categories, continued

Trended: There are no statistically significant differences among the total sample or by company size compared with two years ago. However, this indicates that rental/lease levels retained the higher levels observed two years ago.

- In contrast, when 2017 is compared to 2015, there were statistically significant increases among the total sample as well as among firms with 1-9 employees and among firms with 10+ employees. This is consistent with the general level of renting/leasing increasing between 2015 and 2017.

RENTAL/LEASE in MULTIPLE CATEGORIES (By Firm Size)														
	Total Sample					1-9 Employees					10+ Employees			
	2019	2017	2015	2013		2019	2017	2015	2013		2019	2017	2015	2013
	(236)	(234)	(376)	(374)		(150)	(162)	(276)	(282)		(85)	(71)	(98)	(91)
	%	%	%	%		%	%	%	%		%	%	%	%
“Any” Lease/Rental	<u>60</u>	<u>57></u>	<u>37</u>	<u>40</u>		<u>51</u>	<u>47></u>	<u>33</u>	<u>36</u>		<u>75</u>	<u>81></u>	<u>48</u>	<u>51</u>
Only 1 Category	14	16	18	21		15	17	19	20		12	13	13	< 23
Lease/Rent in Multiple/2+ Categories	<u>46=</u>	<u>41></u>	<u>19</u>	<u>19</u>		<u>37</u>	<u>30></u>	<u>14</u>	<u>16</u>		<u>64</u>	<u>68></u>	<u>35^</u>	<u>28</u>
In 2 Categories	13	<u>14></u>	8	10		<u>12</u>	<u>12=</u>	8	10		14	<u>19></u>	10	12
In 3+ Categories	33 =	<u>27></u>	11	9		25	<u>18></u>	6	6		49	<u>49></u>	<u>25^</u>	16

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

[▲] Not significant on this base size

Before we delve into the individual types of tools and equipment, here is an overview of use of the tools and equipment measured in this survey and with the method of obtaining each in 2019. As noted a few pages earlier, there are a small number of areas, including – Cranes, Digging/HDD/boring equipment, Aerial lifts, Cranes and Mobile office space -- where a higher percentage said that they made a 2019 *purchase* and/or *rental/lease* than say that their firm *used* this type of equipment in 2019. This could be an error in reporting on the part of participants or it could be that these items were acquired in anticipation of their later use or some combination of the two.

	Use in 2019	Purchase in 2019	Lease/ Rent in 2019	Purchase or Lease/Rent in 2019	Use Vs. Obtained (A minus D)
	A	B	C	D	E
	Total	Total	Total	Total	Total
	(236)	(236)	(236)	(236)	(236)
	%	%	%	%	%
“Any” ...	90	84	60	87	3
Hand tools	81	74	6	75	6
Power tools	79	68	12	69	10
Electrical testers, multimeters, etc.	78	55	3	56	22
Measuring tools (including digital)	78	49	2	49	29
Fishing tools	76	46	3	47	29
Phones: smart/mobile/cell or two-way radio/push-to-talk	71	43	3	44	27
Pipe threaders, benders, cutters	70	35	6	38	32
Labeling/identification (cable/panel)	67	36	1	36	31
Personal protective equipment, including apparel and accessories	65	43	3	43	22
Job-site safety equipment	58	34	7	38	20
Cable pullers	54	25	8	30	24
Tablets or portable reading devices	51	31	2	31	20
Portable generators	51	19	13	28	23
Aerial lifts/scaffolding	49	11	45	51	-2
Temporary job-site lighting	48	26	5	28	20
Trailers (to haul equipment/materials)	46	17	9	23	23
LAN, datacom, other low-voltage	37	22	2	22	15
Estimating software	36	15	3	16	20
Digging/HDD/boring equipment	33	9	34	39	-6
Thermal imaging	32	12	5	16	16
CAD software	24	12	2	12	12
Project management software	23	9	1	9	14
Tool and inventory control software	21	9	1	9	12
Scheduling sales and services software	21	8	1	8	13
BIM software	16	9	2	9	7
Mobile office space (trailers)	14	5	14	16	-2
Cranes	14	3	25	27	-13
3D scanner	8	5	2	6	2
Drones	8	5	2	6	2
3D printer	8	4	2	6	2

Tools:

Hand Tools Purchase and Rental/Lease Behavior

74% of respondent firms made a purchase in the Hand tools category in 2019, statistically unchanged compared with 2017. 6% said that their firm obtained Hand tools through rental/lease, also statistically unchanged compared with two years earlier.

HAND TOOLS (2019 Trended)									
	In 2019		In 2017		In 2015		In 2013		In 2011
	Total		Total		Total		Total		Total
	(236)		(234)		(376)		(374)		(234)
Purchase Level	74%	=	70%	=	70%	<	77%	>	69%
Rental/Lease	6.4%	=	3.5%						

- In 2019, there were no subgroup differences by number of employees in terms of purchase or rental/lease. Firms that work primarily on CII projects are significantly more likely to report hand tool purchases, compared with firms that work primarily on residential projects. However, there is no difference by primary type of construction activity on the rental/lease of hand tools.

HAND TOOLS (2019 by Subgroups)					
	Number of Employees			Work Primarily In	
	Total	1-9	10+	Residential	CII
	(236)	(150)	(85)	(84)	(116)
Purchase Level	74%	73%	78%	66%	< 81%
Rental/Lease	6.4%	6.7%	5.9%	7.1%	6.0%

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Trended Results

- Both *purchase* and *rental/lease* levels are statistically unchanged compared to two years earlier in total (shown on the preceding page), by number of employees and among firms working primarily in residential construction. However, there was a statistically significant increase in the purchase level of hand tools among firms working primarily on CII projects compared with two years earlier.

HAND TOOLS (2019 By Subgroups Trended)								
	Number of Employees				Work Primarily In...			
	1-9		10+		Residential		CII	
	2019	2017	2019	2017	2019	2017	2019	2017
	(150)	(162)	(85)	(71)	(84)	(81)	(116)	(107)
Purchase Level	73%	70%	78%	71	66%	74%	81% >	71%
Rental/Lease	6.7%	2.9%	5.9%	5.2%	7.1%	3.2%	6.0%	3.6%

Estimates and Projections: Hand Tools

ALL INDUSTRY ESTIMATE OF 2019 FIRMS PURCHASING AND RENTING/LEASING: HAND TOOLS

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2018 CBP)	Projected Number Firms Buying or Rented
Hand tools	%	#	#
Purchase	74.2	75,381	55,933
Rental/Lease	6.4	75,381	4,824

Power Tools Purchase and Rental/Lease Behavior

68% of electrical contracting firms reported making a 2019 purchase of Power tools. This purchase level is statistically unchanged from the 2017 purchase level of 66%.

- 12% of electrical contractors reported renting or leasing Power tools in 2019. This is a statistically significant increase versus two years earlier and is significantly higher than any level since 2013.

POWER TOOLS (2019 Trended)								
	In 2019		In 2017		In 2015		In 2013	In 2011
	Total		Total		Total		Total	Total
	(236)		(234)		(376)		(374)	(234)
	%		%		%		%	%
Purchase	68	=	66	=	70	=	72	> 64
Rental/Lease	12.3	>	7.5	>	4	<	7	= 10

Purchase: In 2019, larger firms (10+ employees) and firms that work primarily on CII projects were significantly more likely to report making a 2019 Power tools purchase compared with firms with 1-9 employees and/or firms who work primarily on residential projects.

Rental/Lease: In 2019, firms that work primarily on CII are also more likely than firms that work primarily on residential construction to obtain Power tools through rental or lease. However, there was no difference in rental or lease of Power tools by number of employees.

POWER TOOLS (2019 by Subgroups)					
	Number of Employees			Work Primarily In	
	Total	1-9	10+	Residential	CII
	(236)	(150)	(85)	(84)	(116)
<u>PURCHASE</u>	%	%	%	%	%
Purchase	68	63	< 77	55	< 77
Rental/Lease	12	10	17	5	< 18

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Trended Results

Compared with two years ago, *purchase* levels among the total sample, among firms with 1-9 and with 10+ employees are all statistically unchanged.

Compared to two years ago, 2019 *rental/lease* levels increased among the total sample (shown on the previous page) and among firms working primarily on CII projects.

POWER TOOLS (2019 By Subgroups Trended)												
	Number of Employees						Work Primarily In					
	1-9			10+			Residential			CII		
	2019	2017	2015	2019	2017	2015	2019	2017	2015	2019	2017	2015
	(150)	(162)	(278)	(85)	(71)	(98)	(84)	(81)	(146)	(116)	(107)	(172)
Purchase Level	63%	62%	< 71%	77%	76%	68%	55%	67%	< 77%	77%	73%	67%
Rental/Lease	10%	5.2%	3.9%	17%	13% >	5.4%	5%	6%	3.1%	18% >	10% >	4.7%

Estimates and Projections: Power Tools

ALL INDUSTRY ESTIMATE OF NUMBER OF 2019 FIRMS PURCHASING AND RENTING/LEASING: POWER TOOLS

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2018 CBP)	Projected Number Firms Buying or Renting
Power tools	%		
Purchase	67.8	75,381	51, 108
Rental/Lease	12.3	75,381	9,272

Measuring Tools (Including Digital) Purchase and Rental/Lease Behavior

49% of electrical contracting firms purchased Measuring tools (including digital) in 2019; 1.75% rented or leased in this category in 2019.

Purchase levels are significantly higher among firms that work primarily on CII projects. However, there is no difference by number of employees.

Rental/lease levels: Although at low levels, rental/lease levels are higher among firms with 10+ employees and/or those that work primarily on CII projects. Because rental/lease is so low in this category it will not be included in the rest of this section.

This category cannot be trended since it was first asked about in the most recent Profile study.

MEASURING TOOLS (INCLUDING DIGITAL) 2019					
(By Firm Size and Primary Work Type)					
	In 2019				
	Number of Employees			Work Primarily In	
	Total	1-9	10+	Residential	CII
	(236)	(150)	(85)	(84)	(116)
	%	%	%	%	%
Purchase Level	49.2	46	55	41	< 57
Rental/Lease	1.7	0	< 4.7	0	< 3.4

ALL INDUSTRY ESTIMATE OF 2019 NUMBER OF FIRMS PURCHASING: MEASURING TOOLS (INCLUDING DIGITAL)

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2018 CBP)	Projected Number Firms Buying or Renting
Measuring Tools	%	#	#
Purchase	49.2	75,381	37,087

Fishing Tools Purchase and Rental/Lease Behavior

46% of electrical contracting firms purchased Fishing tools in 2019; 2.5% rented or leased in this category in 2019.

Purchase levels are significantly higher among firms that work primarily on CII projects. However, there is no difference by number of employees.

Rental/lease levels: There are no statistically significant differences by any of the subgroups shown below. Because rental/lease is so low in this category it will not be included in the rest of this section.

This category cannot be trended since it was first asked about in the most recent Profile study.

FISHING TOOLS 2019						
(By Firm Size and Primary Work Type)						
	In 2019					
		Number of Employees			Work Primarily In	
	Total	1-9	10+		Residential	CII
	(236)	(150)	(85)		(84)	(116)
	%	%	%		%	%
Purchase Level	46	43	52		38	< 53
Rental/Lease	2.5	1.3	(<) 4.7		2.4	2.6

(> or <) just short of statistical significance

ALL INDUSTRY ESTIMATE OF 2019 NUMBER OF FIRMS PURCHASING: FISHING TOOLS

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2018 CBP)	Projected Number Firms Buying or Renting
Fishing Tools	%	#	#
Purchase	46.2	75,381	34,826

Pipe Threaders/Benders/Cutters Purchase and Rental/Lease Behavior

35% of electrical contracting firms purchased Pipe threaders/benders/cutters in 2019. The percentage difference compared with two years earlier, when it was 28%, is just short of statistical significance.

5.9% said that their firm obtained Pipe threaders/benders/cutters through rental/lease, which is statistically unchanged compared with two years earlier.

PIPE THREADERS/BENDERS/CUTTERS (2019 Trended)									
	In 2019		In 2017		In 2015		In 2013		In 2011
	Total		Total		Total		Total		Total
	(236)		(234)		(376)		(374)		(234)
	%		%		%		%		%
Purchase	35	(>)	28	>	22	<	28		25
Rental/Lease	5.9	=	4.8	>	2.3				

(> or <) just short of statistical significance

In 2019, larger firms and/or those who work primarily on CII projects are far more likely to *purchase* Pipe threaders/benders/cutters compared with smaller firms and/or those that work primarily on residential projects.

In 2019, firms that work primarily on CII projects are also more likely than firms that work primarily on residential projects to have obtained Pipe threaders/benders/cutters through *rental/lease*. However, there is no difference by number of employees in terms of 2019 rental/lease likelihood.

PIPE THREADERS/BENDERS/CUTTERS (2019 by Subgroups)					
	Number of Employees			Work Primarily In	
	Total	1-9	10+	Residential	CII
	(236)	(150)	(85)	(84)	(116)
	%	%	%	%	%
Purchase	35	26	< 51	14	< 50
Rental/Lease	5.9	4	9	2	< 9

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Trended Results

As noted on the preceding page, both *purchase* and *rental/lease* levels are statistically unchanged among the total sample compared with two years earlier. However, as shown below, there was a significant increase in purchasing by smaller firms (1-9 employees).

Compared with two years ago, there are no other statistically significant differences by the subgroups shown below either in terms of purchase or rental/lease of Pipe threaders/benders/cutters.

PIPE THREADERS/BENDERS/CUTTERS (2019 by Subgroups Trended)												
	Number of Employees						Work Primarily In...					
	1-9			10+			Residential			CII		
	2019	2017	2015	2019	2017	2015	2019	2017	2015	2019	2017	2015
	(150)	(162)	(278)	(85)	(71)	(98)	(84)	(81)	(146)	(116)	(107)	(172)
Purchase Level	26% >	16%	14%	51%	57%	47%	14%	13%	17%	50%	40% >	28%
Rental/Lease	4%	4.1%	1.9%	9.4%	6.4	3.3%	2.4%	4.3% >	0%	8.6%	4.5%	4.3%

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Estimates and Projections: Pipe Threaders/Bender/Cutters

ALL INDUSTRY ESTIMATE OF 2019 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING: PIPE THREADERS, BENDERS, CUTTERS

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2018 CBP)	Projected Number Firms Buying or Renting
Pipe threaders, benders, cutters	%	#	#
Purchase	34.7	75,381	26, 157
Rental/Lease	5.9	75,381	4,447

Cable Pullers Purchase and Rental/Lease Behavior

25% of electrical contracting firms purchased Cable pullers in 2019, which is statistically unchanged vs. the 2017 level of 19%. The percentage of electrical contracting firms renting/leasing, at 8%, is also statistically unchanged compared with two years ago.

CABLE PULLERS (2019)					
	In 2019		In 2017		In 2015
	Total		Total		Total
	(236)		(234)		(376)
Purchase	25%	=	19%	>	10%
Rented/Leased	8.1%	=	8.2%	>	2.7%

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Larger firms and/or those that work primarily on CII projects are significantly more likely to have obtained Cable pullers in the previous year by *purchase* compared with smaller firms and/or those that work primarily on residential projects.

Larger firms are also more likely than smaller firms to have obtained Cable pullers through *rental/lease* compared with smaller firms. However, in 2019, there was no difference in the likelihood to rent or lease Cable pullers by the primary type of work performed.

CABLE PULLERS (2019 by Subgroups)					
	Number of Employees			Work Primarily In	
	Total	1-9	10+	Residential	CII
	(236)	(150)	(85)	(84)	(116)
	%	%	%	%	%
Purchase	25	13	< 46	5	< 38
Rented/Leased	8	5	< 13	6	10

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Trended Results

Compared to two years ago, there are no statistically significant differences in purchase or rental /lease of Cable pullers either by number of employees or by primary type of work performed. As shown on the preceding page, nor was there any difference when comparing the total sample with results from two years ago.

CABLE PULLERS (2019 Trended)												
	Number of Employees						Work Primarily In...					
	1-9			10+			Residential			CII		
	2019	2017	2015	2019	2017	2015	2019	2017	2015	2019	2017	2015
	(150)	(162)	(278)	(85)	(71)	(98)	(84)	(81)	(146)	(116)	(107)	(172)
Purchase Level	13%	10% >	5%	46%	41% >	24%	4.8%	4.9%	7%	38%	29%>	14%
Rental/Lease	5.3%	4.3%	3%	13%	18% >	1.7%	6%	3.5%	3.5%	10%	11%>	2.9%

Estimates and Projections: Cable Pullers

ALL INDUSTRY ESTIMATE OF 2019 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING: CABLE PULLERS

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2018 CBP)	Projected Number Firms Buying or Renting
Cable pullers	%	#	#
Purchase	24.6	75,381	18, 544
Rental/Lease	8.1	75,381	6,106

Construction Site Equipment

Construction Site Equipment is one of the few categories where some equipment is more likely to be obtained through *rental/lease* than through *purchase*. In fact, far more electrical contracting firms continue to obtain Aerial lifts/scaffolding, Digging/HDD/boring equipment, and Cranes through *rental/lease* than through *purchase*. Mobile office space also falls into this category, but the difference between renting/leasing and purchase is less than 10 percentage points.

- In contrast, however, Personal protective equipment, Job-site safety equipment and Temporary job-site lighting are far more likely to be purchased rather than rented/leased.
- In all other cases – Mobile office space (trailers), Trailers to haul equipment/materials and Portable generators – the difference between renting/lease and purchase is less than 10 percentage points.

NB: Bolding for emphasis; stat testing doesn't make sense because the sample that rented/leased overlaps with the sample that made purchases.

2019 Rental/Lease to Purchase Comparison		
	Rental/Lease	Purchase
	2019	2019
	(236)	(236)
	%	%
<u>“Any” Purchase/Lease ...</u>		
Aerial lifts/scaffolding	45	11
Digging/HDD/boring equipment	34	9
Cranes	25	3
Mobile office space (trailers)	14	5
Trailers (to haul equipment/materials)	9	17
Portable generators	13	19
Personal protective equipment, including apparel and accessories	3	43
Job-site safety equipment	7	34

Temporary job-site lighting	5	26
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Trended Results

- *Rental/lease* levels jumped dramatically and significantly for only one category – Cranes, compared with two years earlier. Rental/lease in all of the other categories remained statistically unchanged compared with two years earlier.
- In contrast, the percentage making a past year *purchase* of Aerial lifts/scaffolding increased significantly, returning to the 2015 level. Purchase of Digging/HDD/boring equipment rose compared with two years earlier and returned to its 2013-2011 purchase level. Purchase levels in all of the other categories remain statistically unchanged compared with two years earlier.

	Rental/Lease Comparisons Trended						Purchase Comparison Trended				
	2019	2017	2015	2013	2011		2019	2017	2015	2013	2011
	(236)	(234)	(376)	(374)	(234)		(236)	(234)	(376)	(374)	(234)
	%	%	%	%	%		%	%	%	%	%
<u>“Any” Purchase/Rental/Lease ...</u>											
Aerial lifts, scaffolding	45	46 >	28	29	29		11 >	6	< 10	< 16 =	13
Digging/HDD/boring equipment	34	28 >	12 =	16	< 27		9 >	4 =	7 =	9	9
Cranes*	25 >	17 >	6	NA	NA		3	1 =	2	NA	NA
Mobile office space (trailers)*	14	12 >	6	NA	NA		5	3 =	4	NA	NA
Portable generators*	13	11 >	4	NA	NA		19	16 =	19	NA	NA
Trailers (to haul equipment/materials)*	9	8 >	NA	NA	NA		17	12 =	9	NA	NA

* First included in the 2016 Profile Study

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Aerial Lifts/Scaffolding Rental/Lease and Purchase Behavior

In 2019, 45% of firms obtained Aerial lifts/scaffolding through *rental/lease* and 11% through *purchase*.

- Lease/Rental: The percentage *renting or leasing* Aerial lifts/scaffolding held steady compared with two years earlier.
- Purchase: In contrast to the rental/lease results, the percentage making a *purchase* in 2019 increased significantly from 2017, returning to its 2015 level. This is the first time that purchase levels rose since 2013.

Aerial Lifts/Scaffolding (2019 Trended)									
	In 2019		In 2017		In 2015		In 2013		In 2011
	Total		Total		Total		Total		Total
	(236)		(234)		(376)		(374)		(234)
Rental/Lease	45%	=	46%	>	28%		29%		29%
Purchase	11%	>	6%	<	10%	<	16%	=	13%

Rental/Lease: Larger firms and/or those that work primarily on CII projects are more likely than smaller firms and/or those that work primarily on residential projects to have *rented or leased* Aerial lifts/scaffolding in 2019.

Purchase: Larger firms were more likely than smaller firms to have purchased Aerial lifts/scaffolding in 2019. However, there is no difference in *purchase* of Aerial lifts/scaffolding by the primary type of work performed.

AERIAL LIFTS/SCAFFOLDING RENTAL/LEASE and PURCHASE (By Firm Size and Primary Work Type) 2019					
		Number of Employees		Work Primarily In	
	Total	1-9	10+	Residential	CII
	(236)	(150)	(85)	(84)	(116)
	%	%	%	%	%
Rental/Lease	45	37	< 59	26	< 62
Purchase	11	6	< 20	7 =	13

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Trended Results

- Rental/Lease: Compared with two years earlier, there is no statistically significant change by number of employees or primary type of work performed.
- Purchase: In contrast, there has been a statistically significant increase in the purchase of Aerial lifts/scaffolding among smaller firms and/or those that work primarily on residential projects.

AERIAL LIFTS AND SCAFFOLDING (2019 Trended)												
	Number of Employees						Work Primarily In...					
	1-9			10+			Residential			CII		
	2019	2017	2015	2019	2017	2015	2019	2017	2015	2019	2017	2015
	(150)	(162)	(278)	(85)	(71)	(98)	(84)	(81)	(146)	(116)	(107)	(172)
Rental/Lease	37% =	38% >	23%	59% =	64% >	40%	26% =	28% =	19% =	62% =	55% >	37%
Purchase	6% >	1.2%	< 9%	20% =	18% =	13%	7% >	1.1%	< 8% =	13% =	11% =	12%

Estimates and Projections: Aerial Lifts/Scaffolding

ALL INDUSTRY ESTIMATE OF 2019 NUMBER OF FIRMS RENTING/LEASING AND PURCHASING AERIAL LIFTS/SCAFFOLDING

	Percent of Respondent Firms Renting or Buying	Number of EC Firms (Source: 2018 CBP)	Projected Number Firms Renting or Buying
Aerial lifts/scaffolding	%	#	#
Rental/Lease	44.9	75,381	33,846
Purchase	11.0	75,381	8,292

Digging/HDD/Boring Equipment Rental/Lease and Purchase Behavior

In 2019, 34% of electrical contracting firms obtained Digging/HDD/boring equipment through *rental/lease* and 8.5% through *purchase*.

- Compared with two years earlier, rental/lease levels are statistically unchanged while the percentage that purchased Digging/HDD/boring equipment doubled to 8.5% from 4.2%, a statistically significant increase.

DIGGING/HDD/BORING EQUIPMENT (2019 Trended)									
	In 2019		In 2017		In 2015		In 2013		In 2011
	Total		Total		Total		Total		Total
	(236)		(234)		(376)		(374)		(234)
Rental/Lease	34%	=	28%	>	12%	=	16%	<	27%
Purchase	8.5%	>	4.2%	=	7%	=	9%	=	9%

Rental/Lease: Firms that work primarily on CII projects are more likely than those that work primarily on residential projects to rent/lease Digging/HDD/boring equipment, However, there is no difference by firm size.

Purchase: Larger electrical contracting firms and/or those that work primarily on CII projects are more likely than smaller electrical contracting firms and/or those that work primarily on residential projects to purchase Digging/HDD/boring equipment.

DIGGING/HDD/BORING EQUIPMENT RENTAL/LEASE and PURCHASE (2019 by Subgroups)					
	Number of Employees			Work Primarily In...	
	Total	1-9	10+	Residential	CII
	(236)	(150)	(85)	(84)	(116)
	%	%	%	%	%
Rental/Lease	34	31	41	24	< 46
Purchase	8.5	3.3	< 18	2.4	< 10

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Trended Results

- As shown on the previous page, compared with two years earlier, there is no difference in *rental/lease* level among the total sample or, as shown below, by number of employees or among firms that work primarily on residential projects. However, compared to two years earlier, there was an increase in rental/lease among firms that work primarily on CII projects.
- Purchase* levels rose among the total sample, driven by firms with 10+ employees. However, there is no difference among smaller firms or by primary type of work performed.

DIGGING/HDD/BORING EQUIPMENT (2019 By Subgroups Trended)												
	Number of Employees						Work Primarily In...					
	1-9			10+			Residential			CII		
	2019	2017	2015	2019	2017	2015	2019	2017	2015	2019	2017	2015
	(150)	(162)	(278)	(85)	(71)	(98)	(84)	(81)	(146)	(116)	(107)	(172)
Rental/Lease	31% =	25% >	9%	41% =	36% >	20%	24% =	23% >	10%	46% >	31% >	13%
Purchase	3.3% =	2.6% =	6%	18% >	8% =	12%	2.4% =	1.4% =	6%	10% =	6%	8%

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Estimates and Projections: Digging/HDD/Boring Equipment

ALL INDUSTRY ESTIMATE OF 2019 NUMBER OF FIRMS RENTING/LEASING AND PURCHASING DIGGING/HDD/BORING EQUIPMENT

	Percent of Respondent Firms Renting or Buying	Number of EC Firms (Source: 2018 CBP)	Projected Number Firms Renting or Buying
DIGGING/HDD/ BORING EQUIPMENT	%	#	#
Rental/Lease	34.3	75,381	25,856
Purchase	8.5	75,381	6,407

Cranes Rental/Lease and Purchase Behavior

25% of electrical contractors obtained Cranes in 2019 through *rental/lease* and 2.5% through *purchase*.

- The percentage of electrical contractors who obtain Cranes through *rental/lease* rose significantly from 17% in 2017, which itself represents a dramatic and significant rise from the 2015 level of 6.5% (Results from 2015 are not shown below.)
- However, the percentage making a *purchase*, at 2.5 % is statistically unchanged compared with 2017 and with 2015, when it was 2% (Results from 2015 are not shown below).

CRANES (2019 Trended)			
	In 2019		In 2017
	Total		Total
	(236)		(234)
	%		%
Rental/Lease	25	>	17
Purchase	2.5	=	1.2

Cranes are far more likely to be rented/leased by larger firms and/or firms working primarily on CII projects than by smaller firms and/or firms working primarily on residential projects.

The same holds true for purchase. Cranes are far more likely to be purchased by larger firms and/or firms working primarily on CII projects than by smaller firms and/or those working primarily on residential projects.

CRANES (2019 by Subgroups)					
	Number of Employees			Work Primarily In...	
	Total	1-9	10+	Residential	CII
	(236)	(150)	(85)	(84)	(116)
	%	%	%	%	%
Rental/Lease	25	15	< 44	10	< 36
Purchase	2.5	0.7	< 5.9	0	< 4.3

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Trended Results

Rental/Lease: Cranes are far more likely to be rented/leased by larger firms and/or firms working primarily on CII projects than by smaller firms and/or firms working primarily on residential projects.

- However, compared with two years earlier, significantly higher percentages of *smaller* electrical contracting firms now rent/lease Cranes. Rental/leasing also increased among firms that work primarily on CII projects. In contrast, there is no statistically significant difference in rental/lease of Cranes among larger firms and/or among firms that work primarily on residential projects.

Purchase: There are no statistically significant changes in purchase compared with two years earlier by the subgroups shown below.

CRANES (2019 By Subgroups Trended)												
	Number of Employees						Work Primarily In...					
	1-9			10+			Residential			CII		
	2019	2017	2015	2019	2017	2015	2019	2017	2015	2019	2017	2015
	(150)	(162)	(278)	(85)	(71)	(98)	(84)	(81)	(146)	(116)	(107)	(172)
	%	%	%	%	%	%	%	%	%	%	%	%
Rental/Lease	15 >	6.7 >	3.1	44 =	42 >	15	10 =	4.9 =	1.4	36 >	28 >	10
Purchase	0.7 =	0.7 =	1	5.9 =	2.6 =	6	0	0	0	4.3 =	2.8 =	3

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Estimates and Projections: Cranes

ALL INDUSTRY ESTIMATE OF 2019 NUMBER OF FIRMS RENTING/LEASING AND PURCHASING: CRANES

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2018 CBP)	Projected Number Firms Buying or Renting
CRANES	%	#	#
Rental/Lease	25.0	75,381	18,845
Purchase	2.5	75,381	1,885

Mobile Office Space (Trailers) Rental/Lease and Purchase Behavior

14% of electrical contractors obtained Mobile office space (trailers) in 2019 through *rental/lease* and 4.7% through *purchase*. The levels of rental/lease and purchase are each statistically unchanged compared to two years earlier.

MOBILE OFFICE SPACE (2019 Trended)			
	In 2019		In 2017
	Total		Total
	(236)		(234)
	%		%
Rental/Lease	14	=	12
Purchase	4.7	=	2.8

Mobile office space (trailers) is more likely to have been obtained in 2019 by larger firms and/or firms working primarily on CII projects than by smaller firms and/or firms working primarily on residential projects. This is the case for both rental/lease and purchase.

MOBILE OFFICE SPACE (2019 by Subgroups)					
		Number of Employees		Work Primarily In	
	Total	1-9	10+	Residential	CII
	(236)	(150)	(85)	(84)	(116)
	%	%	%	%	%
Rental/Lease	14	4	< 32	2.4	< 22
Purchase	4.7	1.3	< 10.6	1.2	< 6.0

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Trended Results

Rental/Lease: There are no significant differences by any of the subgroups shown below compared to two years earlier. This is consistent with the fact that there was no difference among the total sample compared with two years ago.

Purchase: There are no statistically significant changes in Mobile office space (trailers) purchase compared with two years earlier by any of the subgroups shown below. As above, this is consistent with the fact that there was no difference among the total sample compared with two years ago.

MOBILE OFFICE SPACE (2019 By Subgroups Trended)								
	Number of Employees				Work Primarily In...			
	1-9		10+		Residential		CII	
	2019	2017	2019	2017	2019	2017	2019	2017
	(150)	(162)	(85)	(71)	(84)	(81)	(116)	(107)
	%	%	%	%	%	%	%	%
Rental/Lease	4 =	4.3	32 =	31	2.4 =	3.8	22 =	17
Purchase	1.3 =	0	10.6 =	9	1.2 =	0	6.0 =	5.1

Estimates and Projections: Mobile Office Space (trailers)

ALL INDUSTRY ESTIMATE OF 2019 NUMBER OF FIRMS RENTING/LEASING AND PURCHASING: MOBILE OFFICE SPACE

	Percent of Respondent Firms Renting or Buying	Number of EC Firms (Source: 2019 CBP)	Projected Number Firms Renting or Buying
Mobile office space	%	#	#
Rental/Lease	14.0	75,381	10,553
Purchase	4.7	75,381	3,543

Portable Generators Purchase and Rental/Lease Behavior

In the next two sections -- Portable generators and Trailers (to haul equipment/materials) –the percentages obtaining this equipment through *purchase* and *rental/lease* are more comparable to each other than is the case with other types of job site equipment.

19% of electrical contracting firms *purchased* Portable generators in 2019, statistically unchanged from the 2017 results. 13% obtained Portable generators through *rental/lease*, also statistically unchanged compared to two year earlier.

PORTABLE GENERATORS (2019 Trended)			
	In 2019		In 2017
	Total		Total
	(236)		(234)
	%		%
Purchase	19	=	16
Rental/Lease	13	=	11

Larger firms and/or those that work primarily on CII projects are significantly more likely than smaller firms and/or those that work primarily on residential projects to have made a purchase or rental/lease in this category.

PORTABLE GENERATORS (2019 by Subgroups)					
		Number of Employees		Work Primarily In	
	Total	1-9	10+	Residential	CII
	(236)	(150)	(85)	(84)	(116)
	%	%	%	%	%
Purchase	19	11	< 33	6	< 28
Rental/Lease	13	6	< 26	4	< 21

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Trended Results

Purchase: There are no differences among the total sample or by number of employees or by primary type of work in the purchase of Portable generators compared with two years earlier.

Rental/lease: The same holds true for rental/lease where there are no differences among the total sample or by number of employees or by the primary type of work performed compared with two years earlier.

PORTABLE GENERATORS (2019 Trended)										
	Total		Number of Employees				Work Primarily In...			
			1-9		10+		Residential		CII	
	2019	2017	2019	2017	2019	2017	2019	2017	2019	2017
	(236)	(234)	(150)	(162)	(85)	(71)	(84)	(81)	(116)	(107)
	%	%	%	%	%	%	%	%	%	%
Purchase	19 =	16	11 =	10	33 =	31	6 =	9	28 =	20
Rental/Lease	13 =	11	6 =	7	26 =	20	3.6 =	3.5	21 =	16

Estimates and Projections: Portable Generators

ALL INDUSTRY ESTIMATE OF 2019 NUMBER OF FIRMS RENTING/LEASING AND PURCHASING: PORTABLE GENERATORS

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2018 CBP)	Projected Number Firms Buying or Renting
Portable generators	%	#	#
Purchase	19.1	75,381	14,398
Rental/Lease	13.1	75,381	9,875

Trailers (To Haul Equipment/Materials) Purchase and Rental Behavior

This is the second of the two categories where rental/lease plays at least a non-negligible role, and where the level of purchase is actually comparable to the level of rental/lease.

17% of electrical contracting firms *purchased* Trailers (to haul equipment/materials) in 2019. This is statistically unchanged from the level observed in 2017.

9% *rented or leased* Trailers (to haul equipment/materials) in 2019, also statistically unchanged compared with 2017 results.

TRAILERS (TO HAUL EQUIPMENT/MATERIALS) (2019)			
	In 2019		In 2017
	Total		Total
	(236)		(234)
Purchase	17%	=	12%
Rental/Lease	9%	=	8%

Purchase levels are higher among firms with 10+ employees and/or among firms working primarily on CII projects.

There are no statistically significant differences in *rental/lease* levels by number of employees or by the primary type of work performed.

TRAILERS (TO HAUL EQUIPMENT/MATERIALS) (2019)					
	Number of Employees			Work Primarily In	
	Total	1-9	10+	Residential	CII
	(236)	(150)	(85)	(84)	(116)
	%	%	%	%	%
Purchase	17	10	< 28	6	< 22
Rental/Lease	9	7	13	5	11

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Trended Results

Purchase: There are no statistically significant differences among the total sample, by number of employees or by primary type of work in the purchase of Trailers (to haul equipment/materials) compared with two years earlier.

Rental/lease: The same holds true for rental/lease where there are no statistically significant differences among the total sample, by number of employees or by the primary type of work performed in the rental/lease of Trailers (to haul equipment/materials) compared with two years earlier.

TRAILERS (TO HAUL EQUIPMENT/MATERIALS) (2019 Trended – By Subgroup)										
			Number of Employees				Work Primarily In...			
	Total		1-9		10+		Residential		CII	
	2019	2017	2019	2017	2019	2017	2019	2017	2019	2017
	(236)	(234)	(150)	(162)	(85)	(71)	(84)	(81)	(116)	(107)
	%	%	%	%	%	%	%	%	%	%
Purchase	17 =	12	10 =	7	28 =	24	6 =	4	22 =	20
Rental/Lease	9 =	8	7 =	6	13 =	12	4.8 =	4.6	11 =	14

Estimates and Projections: Trailers (to Haul Equipment/Materials)

ALL INDUSTRY ESTIMATE OF 2019 NUMBER OF FIRMS RENTING/LEASING AND PURCHASING: TRAILERS (TO HAUL EQUIPMENT/MATERIALS)

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2018 CBP)	Projected Number Firms Buying or Renting
Trailers (to haul equipment/materials)	%	#	#
Purchase	16.5	75,381	12,438
Rental/Lease	8.9	75,381	6,709

Personal Protective Equipment, Including Apparel and Accessories: Purchase and Rental Behavior

In the remaining sections – Personal protective equipment, Job-site safety equipment, and Temporary job-site lighting -- purchase plays a much more dominant role than does rental/lease.

43% of electrical contracting firms reported a 2019 *purchase* of Personal protective equipment, including apparel and accessories, statistically unchanged compared with 2017.

Only 3.4% of electrical contracting firms *rented/leased* in this category; also statistically unchanged from the levels observed in 2017.

PERSONAL PROTECTIVE EQUIPMENT/APPAREL and ACCESSORIES							
	2019		In 2017		In 2015		In 2013
	Total		Total		Total		Total
	(236)		(234)		(376)		(374)
Purchase	43%	=	42%	>	31%	<	44%
Rental/Lease	3.4%	=	2%	=	0.6%		

Purchase levels are higher among larger companies and/or firms that work primarily on CII construction rather than for smaller firms and/or those that primarily work on residential construction.

Rental/lease, although at a low level among the total sample, is nevertheless significantly higher among firms with 10+ employees and/or those that work primarily on CII projects.

PERSONAL PROTECTIVE EQUIPMENT/ APPAREL and ACCESSORIES (2019)						
	Total	Number of Employees			Work Primarily In	
		1-9	10+		Residential	CII
	(236)	(150)	(85)		(84)	(116)
	%	%	%		%	%
Purchase	43	34	< 59		27	< 53
Rental/Lease	3.4	1.3	< 7		0	< 6

Trended Results

Purchase: There are no differences among the total sample, as shown on the previous page or, as shown below, by number of employees or by primary type of work in the purchase of Personal protective equipment, including apparel and accessories, compared with two years earlier.

Rental/lease: The same holds true for rental/lease where there are no differences among the total sample, as shown on the previous page or, as shown below, by number of employees or by the primary type of work performed in the rental/lease of Personal protective equipment, including apparel and accessories, compared with two years earlier.

PERSONAL PROTECTIVE EQUIPMENT/ APPAREL and ACCESSORIES (2019 Trended)												
	Number of Employees						Work Primarily In.					
	1-9			10+			Residential			CII		
	2019	2017	2015	2019	2017	2015	2019	2017	2015	2019	2017	2015
	(150)	(162)	(278)	(85)	(71)	(98)	(84)	(81)	(146)	(116)	(107)	(172)
Purchase	34% =	31% =	27%	59% =	68% >	41%	27 =	27 =	26%	53 =	54% >	35%
Rental/Lease	1.3% =	0.7%	NA	7% =	5%	NA	0 =	1.4%	NA	6% =	3.4%	NA

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

Estimates and Projections: Personal Protective Equipment/ Apparel and Accessories

ALL INDUSTRY ESTIMATE OF 2019 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING: PERSONAL PROTECTIVE EQUIPMENT/ APPAREL AND ACCESSORIES

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2018 CBP)	Projected Number Firms Buying or Renting
Personal protective equipment, including apparel and accessories	%	#	#
Purchase	42.8	75,381	32,263
Rental/Lease	3.4	75,381	2,563

Job-site Safety Equipment Purchase and Rental/Lease Behavior

34% of electrical contracting firms reported a 2019 purchase of Job-site safety equipment. 7% obtained Job-site safety equipment through rental/lease. Both purchase levels and levels of rental/lease are statistically unchanged compared with two years earlier.

JOB-SITE SAFETY EQUIPMENT (2019 Trended)									
	In 2019		In 2017		In 2015		In 2013		In 2011
	Total		Total		Total		Total		Total
	(236)		(234)		(376)		(374)		(234)
Purchase	34%	=	28%	=	26%	<	32%	=	29%
Rental/Lease	7%	=	6%	>	1.4				

In 2019, *purchase* levels were higher among larger companies and/or companies that work primarily on CII projects compared with companies that have 1-9 employees and/or that work primarily on residential projects for Job-site safety equipment.

In 2019, larger companies were more likely to *rent/lease* Job-site safety equipment, however there were no differences by primary type of work.

JOB-SITE SAFETY EQUIPMENT (2019 by Subgroups)						
		Number of Employees			Work Primarily In...	
	Total	1-9	10+		Residential	CII
	(236)	(150)	(85)		(84)	(116)
	%	%	%		%	%
Purchase	34	23	< 53		17	< 44
Rental/Lease	7	4.7	< 12		6	9

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow

Trended Results

As shown on the preceding page, *purchase* levels are statistically unchanged among the total sample. Nevertheless, purchase levels posted a significant increase among firms with 1-9 employees but were unchanged among firms with 10+ employees and/or those that work primarily on CII projects or residential projects.

- In contrast, note that two years ago purchase levels rose among larger firms and/or firms that work primarily on CII projects even though there was no statistically significant increase in purchase among the total sample between 2015 and 2017. In contrast, the exact opposite occurred two years ago. Specifically, purchase levels rose significantly among larger firms and/or those that work primarily on CII projects.

As shown on the preceding page, there was no statistically significant change in *rental/lease* behavior among the total sample. As shown below, nor are there changes in rental/lease by number of employees or by primary type of work performed compared with two years earlier. Note that from 2015 and 2017, where rental/lease behavior rose among the total sample, it also rose among firms with 10+ employees and/or among firms that worked primarily on residential projects as well as among firms working on CII projects.

JOB-SITE SAFETY EQUIPMENT (2019 Trended by Subgroup)												
	Number of Employees						Work Primarily In					
	1-9			10+			Residential			CII		
	2019	2017	2015	2019	2017	2015	2019	2017	2015	2019	2017	2015
	(150)	(162)	(278)	(85)	(71)	(98)	(84)	(81)	(146)	(116)	(107)	(172)
Purchase	23% >	14% =	18%	53% =	60% >	46%	17% =	9% =	16%	44% =	45% >	35%
Rental/Lease	4.7% =	3%	1.2%	12 % =	14% >	2.1%	6% =	4.6% >	.6%	9% =	7.3% >	2.6%

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow

Estimates and Projections: Job-site Safety Equipment

ALL INDUSTRY ESTIMATE OF 2019 NUMBER OF FIRMS RENTING/LEASING AND PURCHASING:

JOB-SITE SAFETY EQUIPMENT

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2018 CBP)	Projected Number Firms Buying or Renting
Job-site safety equipment	%	#	#
Purchase	33.9	75,381	25,554
Rental/Lease	7.2	75,381	5,427

Temporary Job-site Lighting Purchase and Rental/Lease Behavior

26% of electrical contracting firms purchased Temporary job-site lighting in 2019, which is statistically unchanged from the 23% which was measured two years earlier. 4.7% rented or leased in this category in 2019, which is also statistically unchanged from two years earlier.

TEMPORARY JOB-SITE LIGHTING			
	In 2019		In 2017
	Total		Total
	(236)		(234)
	%		%
Purchase	26	=	23
Rental/Lease	4.7	=	4.2

Both *Purchase* levels and *rental/lease* levels are significantly higher among larger electrical contracting firms and/or among those that work primarily on CII projects.

TEMPORARY JOB-SITE LIGHTING (2019)					
	Number of Employees			Work Primarily In	
	Total	1-9	10+	Residential	CII
	(236)	(150)	(85)	(84)	(116)
	%	%	%	%	%
Purchase	26	14	< 47	12	< 38
Rental/Lease	4.7	1.3	< 11	0	< 7

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow

Trended Results

Compared with two years earlier, *purchase* levels are statistically unchanged among the total sample (shown on the preceding page) and as shown below, by number of employees and by primary type of work performed.

Although *rental/leasing* is also statistically unchanged among the total sample, by number of employees and among firms working primarily on CII projects, it posted a significant decline among firms working primarily on residential projects compared with two years earlier.

TEMPORARY JOB-SITE LIGHTING (2019 Trended – By Subgroup)										
	Number of Employees						Work Primarily In...			
	Total		1-9		10+		Residential		CII	
	2019	2017	2019	2017	2019	2017	2019	2017	2019	2017
	(236)	(234)	(150)	(162)	(85)	(71)	(84)	(81)	(116)	(107)
	%	%	%	%	%	%	%	%	%	%
Purchase	26 =	23	14 =	14	47 =	46	12 =	9	38 =	33
Rental/Lease	5 =	4	1.3 =	3	11 =	7	0 <	4.9	7 =	2.8

ALL INDUSTRY ESTIMATE OF 2019 NUMBER OF FIRMS RENTING AND PURCHASING:

TEMPORARY JOB-SITE LIGHTING			
	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2018 CBP)	Projected Number Firms Buying or Renting
Temporary job-site lighting	%	#	#
Purchase	25.8	75,381	19,448
Rental/Lease	4.7	75,381	3,543