



ELECTRICAL CONTRACTOR

2022 Profile of the Electrical Contractor

Electrical Contractors: Their Ownership, Purchase and Lease of Vehicles

Plans to purchase or lease business vehicles

*A special report prepared by Renaissance Research & Consulting,
Inc. for ELECTRICAL CONTRACTOR Magazine, December 2022*



**2022 “ELECTRICAL CONTRACTOR MAGAZINE PROFILE”
DATABASE REPORT**

**ELECTRICAL
CONTRACTORS:
THEIR OWNERSHIP,
PURCHASE AND LEASE OF
VEHICLES
PLANS TO PURCHASE OR
LEASE BUSINESS VEHICLES**

INCLUDING ESTIMATES BASED ON THE 2018 COUNTY BUSINESS PATTERNS

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

FOR:

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DECEMBER 2022

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KEY FINDINGS

88% of electrical contracting firms have a fleet of one or more vehicles, statistically unchanged from two years ago when it was 86%. Note that this percentage fluctuates – four years ago it was 93%. About 12% of the firms answering the vehicles questions report having *no* business vehicles.

- Based on findings from the 2014 Profile study, but not repeated since, we learned that a number of factors go into being “vehicle-less”: some respondents were unable to specify the type or types of vehicles in their fleet but said that they had used a company vehicle to get from job to job. Some said that they themselves are assigned to a single location, so that there is no need (for a vehicle) to travel from job to job. In addition, about one-quarter said that they used a personal vehicle to get from job to job. All of this can be revisited in the future. However, based on these earlier findings, we believe that vehicle usage among electrical contractors is higher than the 88% reported.

By company size: 86% of firms with 1-9 employees and 91% of firms with 10+ employees report fleets with one or more of the vehicles included in the survey. These percentages are statistically unchanged compared with two years earlier.

Types of Vehicles:

- Among smaller firms (1-9 employees) Vans/panel trucks and Light pick-up trucks are most common.
- Among larger firms, (10+ employees) Vans/panel trucks and Light pick-up trucks are also most common (about 8 in 10 larger firms report having either or both in their fleets. Almost 5 in 10 large firms report having Medium/heavy pick-up trucks and 43% having Other business vehicles in their fleets.

Vehicles are far more likely to be bought than leased, especially in the case of firms with 10+ employees.

Near-term Vehicle Purchase or Lease

- Almost 6 in 10 of the electrical contractors that took this portion of the survey said that their firm is considering the purchase or lease of a business vehicle in the next 1-3 years, statistically unchanged from two years earlier when it was 49%.
- However, almost three in ten of the electrical contractors that took this portion of the survey (28%) said that their firm is considering the purchase or lease of a specifically *electric or hybrid* business vehicle in the next 1-3 years, almost double and a statistically significant increase from the 15% reported two years ago.

Number of Vehicles: On average, firms report having 8.9 vehicles, a statistically significant increase from the average of 6.3 vehicles reported two years ago

Estimate of the Number of Vehicles: Based on the survey, ELECTRICAL CONTRACTOR magazine estimates that the universe of electrical contractors had a total fleet of between about **481,000 and 727,000 vehicles in 2022 at the 90% level of confidence.**^r

^r We believe that the actual number of vehicles is closer to the top of the range, or possibly even higher because this mean does not include fleets with more than 50 vehicles owned by a small number of the companies in the survey. This was done in order to achieve a tighter confidence band for the estimate. Further, we do not believe that this estimate includes personal vehicles, so that the actual number of vehicles used for business by electrical contractors may well be even higher than the top of the range.

METHODOLOGY

This report focuses on electrical contractors' current fleet ownership, purchase and lease/rental of vehicles. The survey also asks about plans to purchase or rent/lease business vehicles in the next 1-3 years and separately, whether those vehicles will be electric or hybrid.

The survey was conducted by internet among subscribers to ELECTRICAL CONTRACTOR magazine. In addition, in 2022, as in 2020 and 2018, about 100 members of the ELECTRICAL CONTRACTOR Subscriber Research Panel also participated in the survey. The field period for the survey began on January 26, 2022, and ran through April 15, 2022, which was the deadline for the July 2022 article. A total of 843 completed the survey during that time period.

As postal mail participation (also called the "print" sample, since they received their printed survey via postal mail) had dwindled, for the first time in 2022, the survey was only offered on the internet.

Since there was no print sample, the data were not weighted. Data were also not weighted in 2020. In that case, there was no weighting since the proportion of the total attributable to the print list was so low weighting would distort the total statistics.

Each respondent who received the survey through the internet was sent up to seven follow-up emails. 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 since 2018, the magazine also offered a sweepstakes drawing for a chance to win one of ten \$150 Amazon e-gift cards. In 2018 and 2020, the drawing was 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."

This report is drawn from Version 4 – vehicles in fleet, purchased, rented/leased as well as future plans to purchase business vehicles, including those that are specifically electric or hybrid. The base size of Version 4 is 108.

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

For this report, the estimates of market size are based on the 2020 County Business Patterns (CBP).

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.

Methodology Notes

In 2022, as was the case with the 2020 and the 2018 Profile Study, the projected number of vehicles in fleet will be based only on those with between 1 and 49 vehicles.

- Reason for the Change: This is being done to dampen the effect that outliers will have on the mean or average, so that the projections will have a smaller confidence band around them.
 - **Further, since we do not believe that the number of vehicles includes *personal* vehicles, the actual number of vehicles used electrical contractors may well be even higher than the top of the range.**

DETAILED FINDINGS

Types of Vehicles in Respondent's Fleet

The vast majority of electrical contracting firms (88%) have business fleets.

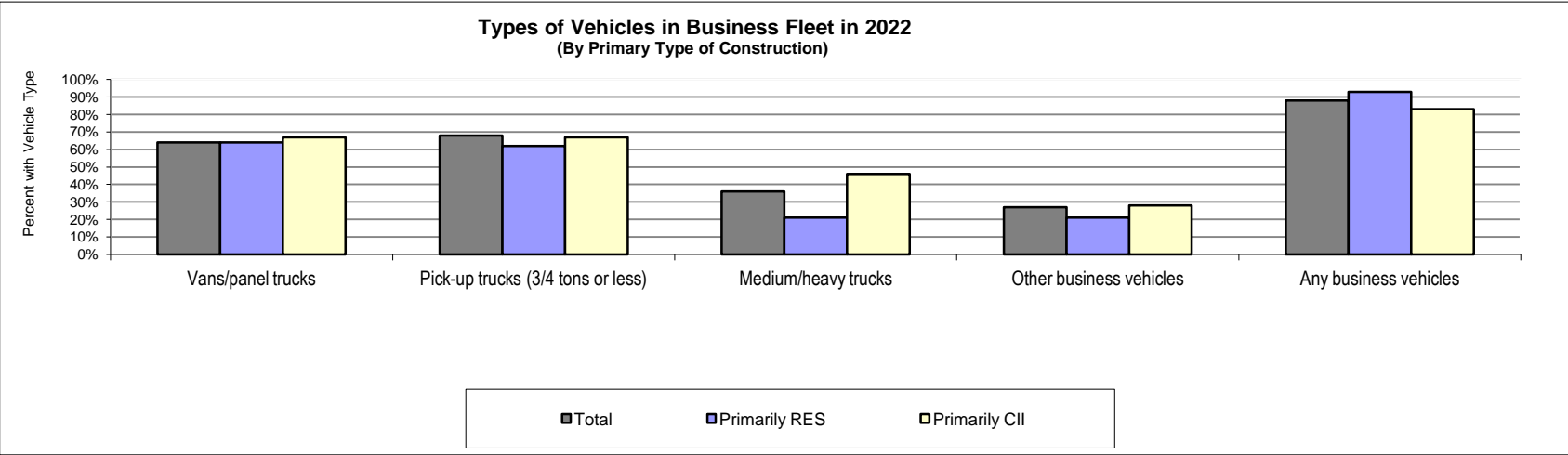
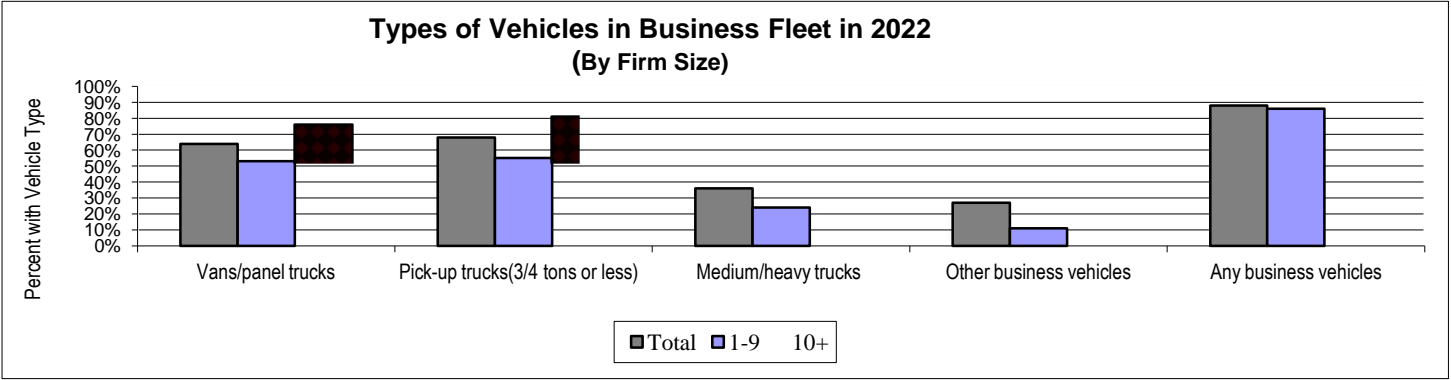
- Among small firms, (1-9 employees) Vans/panel trucks and Light pick-up trucks are most common.
- Among larger firms, Vans/panel trucks and Light pick-up trucks are also most common (about 8 in 10 larger firms report having either or both in their fleets.) Almost 5 in 10 large firms report having Medium/heavy pick-up trucks and 43% report having Other business vehicles.
- Other Business vehicles receive fewer mentions, especially among the total sample and among firms with 1-9 employees.

TYPES OF VEHICLES IN BUSINESS FLEET (2022)			
		Number of Employees	
	Total	1-9	10+
	(108)	(55)	(53)
	%	%	%
Vans/panel trucks	64	53	<76
Pick-up trucks (3/4 ton or less)	68	55	<81
Medium/heavy trucks	36	24	<49
Other business vehicles	27	11	<43
Any business vehicles	88	86	91

- As we've noted in earlier Vehicles Profile Breakout reports, the fact that not all firms report owning these business vehicles is not new¹.

-
- ¹ We explored this in some depth as part of the 2014 Profile Study and found that about 3% were unable to specify the type or types of vehicles in their fleet but said that they used a company vehicle to get from job to job. An additional 3% said that they themselves were assigned to a single location, so that there is no need (for a vehicle) to travel from job to job. There was a small remaining group of about 2% - 3% where the reason for not having a business vehicle was unknown at that point.
 - We also found that about one-quarter of the total who were asked about vehicles used a personal vehicle to get from job to job. Future Profile studies might consider adding questions about use of personal vehicles for business purposes, such as what accommodations, if any, are needed for electrical contractors to use a personal vehicle for business purposes.

The types of vehicles by number of employees and by primarily type of work performed is illustrated below



There are two statistically significant differences compared with two years earlier, as shown below.

- Among the total sample, more firms report having Medium/heavy trucks in their fleet.
- More firms with 10+ employees report fleets with Other Business vehicles

TYPES OF VEHICLES IN BUSINESS FLEET (Trended) by Number of Employees						
	Total		1-9		10+	
	2022	2020	2022	2020	2022	2020
	(108)	(224)	(55)	(153)	(55)	(71)
	%	%	%	%	%	%
Vans/panel trucks	64	62	53	55	76	76
Pick-up trucks (3/4 ton or less)	68	62	55	57	81	73
Medium/heavy trucks	36>	25	24	14	49	48
Other business vehicles	27	19	11	15	43>	28
Any business vehicles	88	86	86	88	91	83

- More firms that work primarily on CII projects report fleets with Medium/heavy trucks compared with two years earlier.

TYPES OF VEHICLES IN BUSINESS FLEET (Trended) by Source of Revenue				
	Residential		CII	
	2022	2020	2022	2020
	(42)	(85)	(57)	(108)
	%	%	%	%
Vans/panel trucks	64	54	67	64
Pick-up trucks (3/4 ton or less)	62	59	67	61
Medium/heavy trucks	21	14	46>	31
Other business vehicles	21	15	28	19
Any business vehicles	93	86	83	84

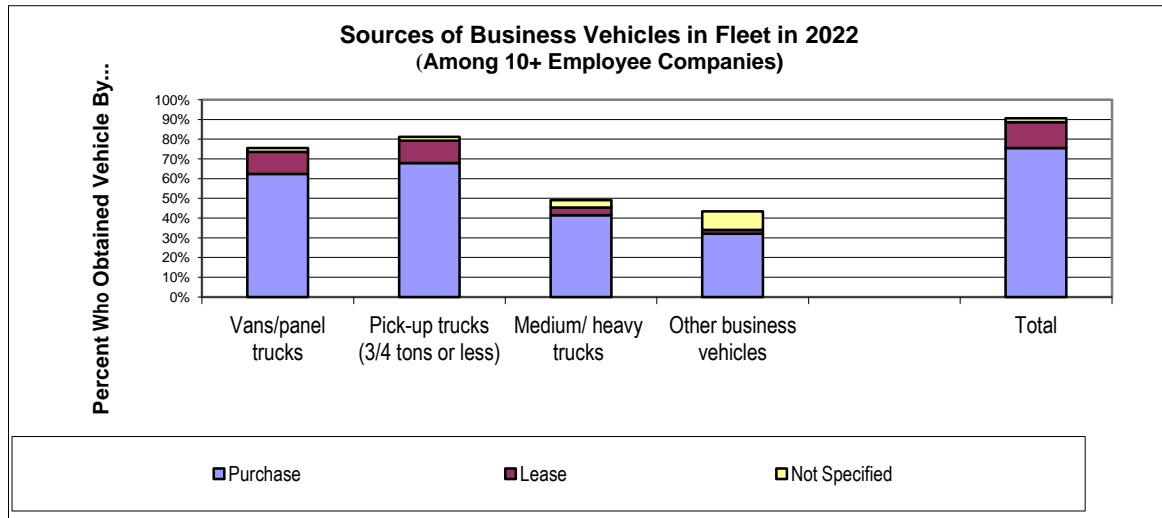
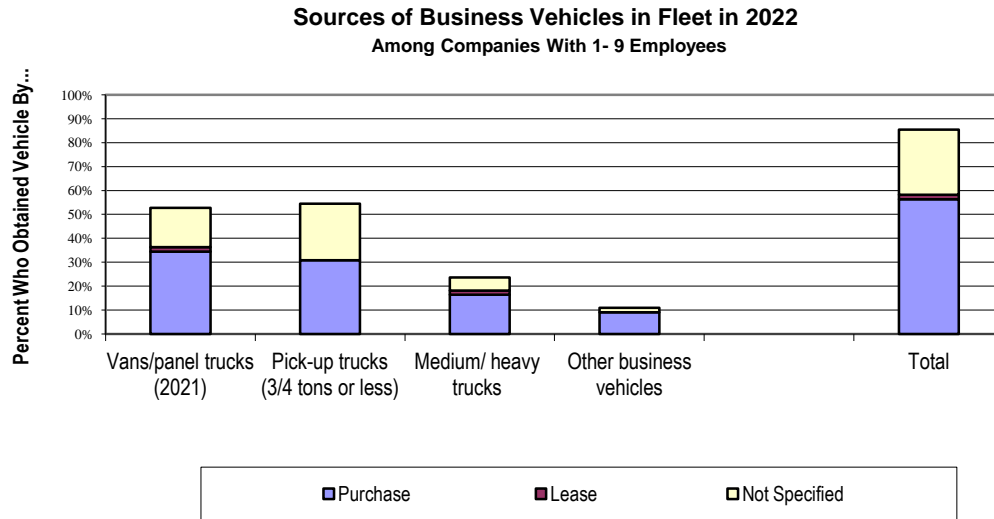
Compared with two years two years earlier, Medium/heavy truck fleets increased among larger firms and/or firms that work primarily on CII projects.

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

Sources of Business Vehicles in Fleet

Among companies with 1-9 employees, the vast majority of vehicles were obtained through purchase (bought). Note however, that since such a high percentage of smaller firms did not specify the source of their vehicles, some portion of the non-specified may have been leased.

Similarly, companies with 10+ employees are also most likely to have bought rather than to lease; however, they also lease at higher rates than smaller companies.



Average Number of Business Vehicles in Respondent's Fleet: 2022

The 108 respondents who participated in this part of the survey reported having a combined business fleet of almost 2054 vehicles in 2022 (not shown).

- On average, the **total** number of business vehicles -- a sum of Vans/panel trucks, Pick-up trucks, Medium/heavy trucks and Other business vehicles -- posted a statistically significant increase from an average of 6.3 vehicles to an average of 8.9 vehicles. While most of the changes to the individual types of vehicles were in the direction of an increase, none of them on their own rose to statistical significance.
- This increase is all the more meaningful because it *excludes* firms with 50 or more vehicles which in turn excludes firms that might have too much effect on the mean

Average Number of Business Vehicles in Respondent's Fleet: 2022

VEHICLES IN BUSINESS FLEET (2022 Vs. 2022 and 2018 and Vs. 2018 Vs. 2016 and 2014)											
	In 2022		In 2020		In 2018		In 2018		In 2016		In 2014
	(108)		(224)		(214)		(214)		(363)		(372)
	#		#		#		#		#		#
Vans/panel trucks	5.5 ^{[5.4]**}	=	4.8 ^{[6.7]**}	=	3.9 ^{[5.1]**}		4.1 ^[6.3]	=	3.9 ^[8.8]	=	3.7 ^[6.9]
Pick-up trucks(3/4 tons or less)	4.8 ^{[6.1]**}	=	3.9 ^{[6.0]**}	=	3.4 ^{[5.4]**}		5.3 ^[19.7]	=	5.9 ^[27.1]	=	5.0 ^[17.3]
Medium/heavy trucks	3.7 ^{[5.8]**}	=	3.6 ^{[4.2]**}	=	2.7 ^{[3.0]**}		2.7 ^{[3.1]**}	=	2.6 ^{[2.8]**}	=	3 ^{[4]**}
Other business vehicles	3.5 ^{[3.1]**}	=	2.8 ^{[4.3]**}	=	1.9 ^{[2.3]**}		1.9 ^{[2.4]**}	=	1.9 ^{[2.5]**}	=	2 ^{[3]**}
Total **	8.9 ^{[10.6]**}	>	6.3 ^{[8.5]**}	=	5.2 ^{[6.9]**}		5.2 ^{[7.1]**}	=	4.7 ^{[6.2]**}	=	5.2 ^{[7.1]**}

**** Mean is based on excluding firms with zero vehicles as well as firms with 50+ vehicles (see note below)**

** Expanding on what was done four years earlier, we used means (averages) that excludes firms with zero vehicles as well as firms with 50+ vehicles for all vehicles categories. This was done out of caution and to reduce the level of uncertainty around estimates because a handful of very large firms can legitimately raise the average substantially, which then gets amplified when estimates involving the entire population are made.

As shown in the columns on the right, between 2014 and 2018, this restriction did not apply to all categories of vehicles. (It only applied in the cases where there are **).

Numbers in [] are standard deviations which are used in stat testing means over time

Average Number of Business Vehicles in Respondent's Fleet by Key Subgroups

Larger electrical contracting firms are more likely to have higher numbers of each of the vehicles included in the survey, and by extension, to have a significantly higher average number of vehicles compared with firms with 1-9 employees. This finding is consistent with findings from two and four years ago (not shown).

In a similar vein, firms that work primarily on Commercial, Industrial, and Institutional (CII) construction are more likely to own Van/panel trucks and Light pick-up trucks as well as having significantly more vehicles, on average in their fleet compared to firms that work primarily on residential construction.

Average Number of Business Vehicles in Respondents Fleet by Subgroups (2022 Profile Study)					
		Number of Employees		Revenue is Primarily From	
2022 - Mean Excluding Zero and 50+ Vehicles	Total	1-9	10+	Residential	CII
	(108)	(55)	(53)	(42)	(57)
	#	#	#	#	#
Vans/panel trucks	5.5 ^{[5.4]**}	2.0 ^[1.8]	<8.1 ^[5.7]	2.5 ^[2.2]	<7.7 ^[6.2]
Light pick-up trucks (3/4 tons or less)	4.8 ^{[6.1]**}	2.2 ^[2.9]	<6.8 ^[7.0]	1.5 ^[1.1]	<7.5 ^[7.5]
Medium/heavy pick-up trucks	3.7 ^{[5.8]**}	2.0 ^[2.4]	<4.6 ^[6.8]	1.3 ^[0.5]	3.6 ^[3.5]
Other business vehicles	3.5 ^{[3.1]**}	1.2 ^[0.4]	<4.1 ^[3.3]	1.3 ^[0.7]	4.5 ^[3.6]
Total	8.9 ^{[10.6]**}	3.3 ^[5.0]	<15 ^[11.8]	3.3 ^[3.2]	<14.4 ^[13]

** Mean is based on excluding firms with zero vehicles as well as firms with 50+ vehicles (see note on previous page)

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow. For further emphasis, the smaller numbers are shown in *italics*.

Numbers in [] are standard deviations which are used in stat testing means over time

Total Vehicles in Fleet -- All Industry Estimate

Number of Vehicles in Fleet:

The 108 companies that responded to this portion of the survey, by themselves, reported having a total fleet of 2054 (not shown).

Based on the survey, ELECTRICAL CONTRACTOR magazine estimates that the universe of electrical contractors had a total fleet of between about **481,000 and 727,000 vehicles in 2022 at the 90% level of confidence.**^x

2022 Total Vehicles in Fleet – All Industry Estimate EXCLUDING FIRMS WITH 50+ VEHICLES					
	Average Number of Vehicles Per Firm	Percent of EC Firms with Vehicles in Fleet	Number of EC Firms (Source: 2020 CBP)	Number of EC Firms with Vehicles in Fleet	Estimated Number of Vehicles in Fleet
Vehicles in Fleet		%			
Mean	8.90	88%	77,079	67,830	603,683
Upper Estimate	10.715	88%	77,079	67,830	726,793
Lower Estimate	7.09	88%	77,079	67,830	480,572

^x As noted in the Methodology section, we believe that the actual number of vehicles is closer to the top of the range, or possibly even higher because this mean does not include fleets with more than 50 vehicles owned by a small number of the companies in the survey. This was done in order to achieve a tighter confidence band for the estimate. Further, we do not believe that this estimate includes personal vehicles, so that the actual number of vehicles used for business by electrical contractors may well be even higher than the top of the range.

Plans to Purchase or Lease Business Vehicles in the Next 1- 3 Years

In the 2022 Profile Study, electrical contractors that participated in this portion of the survey were asked if their company had plans to purchase or lease business vehicles in the next 1 – 3 years.

- As shown below, almost six in ten firms (57%) are planning a near-term purchase or lease.
 - Firms with 10+ employees are substantially more likely to plan an acquisition compared with smaller firms (72% vs. 44%). Along the same lines, firms that work primarily on CII projects (these firms tend to be larger) are substantially and significantly more likely to be planning a vehicle purchase or lease in the next 1 to 3 years compared with firms that work primarily on residential projects (68% vs. 38%).
- The change in interest in acquiring a business vehicle from 2020, when it was 49%, is not statistically significant (not shown).

Whether Firm is Planning to Purchase or Lease Business Vehicles in the Next 1-3 Years					
		Number of Employees		Revenue is Primarily From	
2020 Profile Study	Total	1-9	10+	Residential	CII
	(108)	(55)	(53)	(42)	(57)
	%	%	%	%	%
Yes	57	44	<72	38	<68
No	41	56>	25	62>	28
No Answer/Not Sure	2	0	4	0	4

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

Continues on the next page

Plans to Purchase or Lease Electric or Hybrid Business Vehicles in the Next 1- 3 Years

All respondents who participated in this version of the survey were then asked if their company had plans to purchase or lease/rent specifically hybrid or electric business vehicles in the next 1 – 3 years.

- Almost three in ten (28%) say that their firm is planning to acquire an electric or hybrid vehicle in the next three years. This is approximately double the percentage of those planning this type of acquisition compared to two years ago.
- Interest rose significantly among firms with 10+ employees compared with smaller firms and/or among firms that work primarily on CII rather than among firms working primarily on residential projects.

Whether Firm is Planning to Purchase or Lease Hybrid or Electric Business Vehicles in the Next 1-3 Years										
			Number of Employees				Revenue is Primarily From			
	Total		1-9		10+		Residential		CII	
	2022	2020	2022	2020	2022	2020	2022	2020	2022	2020
	(108)	(224)	(55)	(153)	(53)	(71)	(42)	(85)	(57)	(108)
	%	%	%	%	%	%	%	%	%	%
Yes	28%>	15	18	14	38>	17	17	14	35>	14
No	70	<84	82	86	59	<79	83	84	61	<86
No Answer/Not Sure	2	2	0	1	4	4	0	2	4	0