2006 "ELECTRICAL CONTRACTOR Magazine Profile"
Database Report

Electrical Contractors:
Their Key and Evolving Role in Design/Build//Design/Assist Projects

A Special Report Prepared by
Renaissance Research & Consulting, Inc.

For:

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METHODOLOGY

This report focuses on electrical contracting firms that worked on a Design/Build or Design/Assist basis in 2005. Please note that the Profile study is conducted in even years (2006 or 2004) and asks about the work performed in the previous year (2005 or 2003). The question wording was changed between the 2004 and 2006 studies from "Design/Build" which was asked in 2004 to "Design/Build" or "Design Assist" which was asked in 2006.

The Profile survey was conducted by postal mail and via the Internet between April 7 and June 7, 2006 among a random sample of ELECTRICAL CONTRACTOR subscribers. A total of 1144 surveys were completed during that time, composed of 676 via the Internet and 468 via postal mail surveys. Each respondent who received the survey via the Internet was sent a follow-up e-mail. However, follow-up mailings were not made to non-responders in the postal mail sample. An incentive was offered for participation in the survey: For each completed survey, ELECTRICAL CONTRACTOR magazine would contribute $5 to charity.

The margin of error on the total sample of 1144 is +/- 3% at the 90% level of confidence.

Renaissance Research & Consulting, Inc. (www.renaiss.com) conducted this study for ELECTRICAL CONTRACTOR. Renaissance is an independent marketing research firm, located in New York City, that specializes in market research for the construction industry.

SUMMARY AND CONCLUSIONS

Consistent with the Profile results from two years ago, about 8 in 10 electrical contracting firms worked on a Design/Build or Assist basis in 2005 and, on average, Design/Build or Assist work accounted for over 40% of revenue.

However, the 2006 Profile study reveals a dramatic change in the nature of electrical contracting firms that perform Design/Build or Assist work.

- Compared to two years ago, the composition of firms that perform Design/Build or Design/Assist work has shifted *to* medium and large firms *from* smaller firms; in addition, DB-A work now accounts for more of the revenue of larger electrical contacting firms. More specifically:
    - A significantly higher percent of larger firms (defined as those with 20 - 99 employees) are now working on a DB-A basis, while the percentage of smaller firms (1-9 employees) that work this way has declined compared with two years ago.
    - DB-A work now accounts for a significantly higher percentage of revenue for electrical contractors with 10-19 employees and also for those with 50+ employees and a smaller percentage of revenue for small electrical contracting firms (defined as having 1-9 employees), compared with two years ago.
        - Compared to two years ago, the overall percentage of firms that work on a DB-A basis dropped slightly, but significantly, from 83% to 79% and average revenue from DB-A work declined from 46% to 43%. Both of these are the result of fewer small firms working on a DB-A basis compared with 2003.
    - Substantially more very large firms (defined as having 100+ employees) now say that they work *primarily* on a DB-A basis (37% in 2005 vs. 24% in 2003).
        - However, working *primarily* on a DB-A basis appears to be the province of extremes since small firms (defined as having 1-9 employees are statistically the **most** likely to work *primarily* on a DB-A basis.

Firms performing DB-A work generally mirror the behavior of larger electrical contracting firms:

- As was the case two years ago, firms that do DB-A work report, on average, that a higher percentage of their revenue comes from CII rather than from Residential construction.

- In 2005, electrical contractors working on a DB-A basis are now also more likely to work on New construction projects in addition to Modernization/Retrofit and Maintenance and Repair work compared with firms that did not work on a DB-A basis in 2005.

Firms working on a DB-A basis have more of an opportunity to make brand selections compared with firms that do not provide any design/build or assist services.

- Between about one-quarter and one-third of electrical contractors working on a DB-A basis say that the plans and specs that they now receive are "less complete" than was the case five years ago. In contrast, between 8% and 14% of those who do no DB-A work say that their current plans and specs are "less complete". (This question was first asked in the 2006 study and cannot be trended).

- Almost 6 in 10 electrical contractors that work on a DB-A basis say that they "try to stay within a single **brand** or a single **manufacturer** when working on or designing systems where a Multiple or Equal To or Performance Specification is indicated."

Electrical contracting firms that work on a DB-A basis are far more likely than firms that don't offer design/build or assist services to plan to seek training within the next 12 months (65% vs. 50%) and are also more likely to say that they will take the following types of training: NEC changes, Green/sustainable technology and LEED Certification. The latter two areas may prove to be particularly fruitful niche for electrical contractors offering DB-A services since they allow these contractors to establish themselves as experts in a newly emerging area.

DETAILED FINDINGS

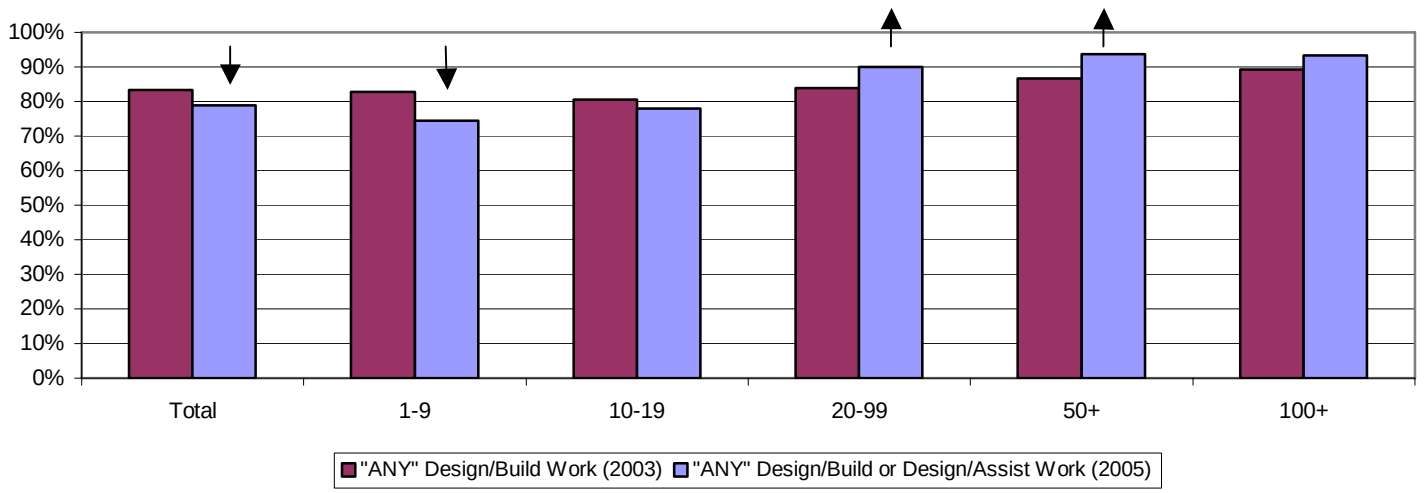
Who Performs Design/Build or Design/Assist Work?

…By Number of Employees

Overall, almost 8 in 10 electrical contracting firms performed Design/Build or Design/Assist work in 2005. Note that companies of all sizes work on a Design/Build or Assist basis.

- The findings shown below suggest changes in the nature of Design/Build work – In 2005 more larger firms (those with 20-99 employees) are now working on a Design/Build or Assist basis and somewhat fewer small firms (defined as having 1-9 employees) said that they worked this way in 2005 compared with 2003.
    - There is no statistically significant change in the percent of firms with 100+ employees who work in this way.

Firm Performed "ANY" Design/Build or Design/Assist Work (2003 Vs. 2005)



↓↑ -- Arrow indicates a significant difference at the 90% confidence level

Who Performs Design/Build or Design/Assist Work?

…By Annual Revenue

- Note the progressive increase in participation in Design/Build or Assist in the 2005 Study as the firm size increases

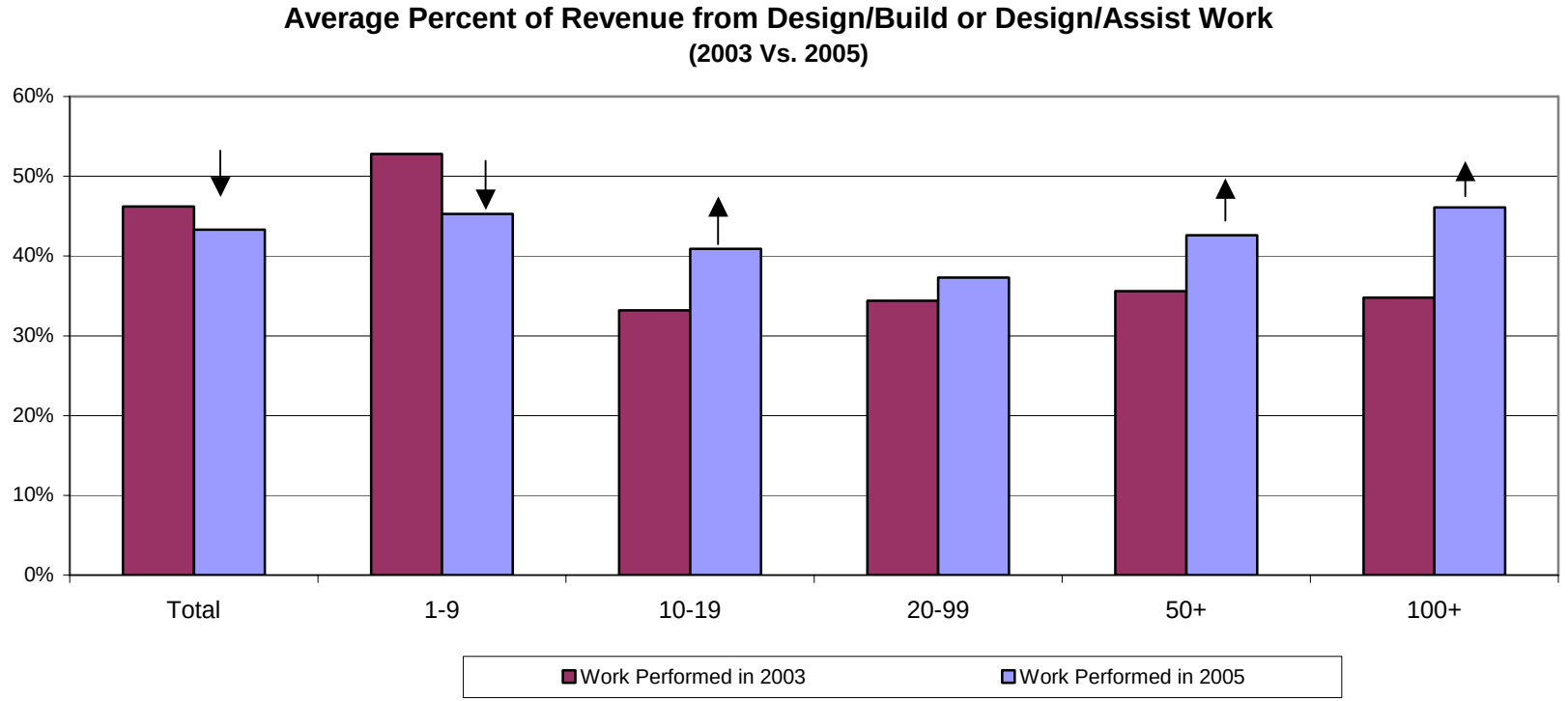
- In contrast, as shown below, in 2003, only the very largest firms were statistically more likely to have worked on a Design/Build basis.

Electrical Contracting Firm Performed "ANY" Design Build or Design/Assist Work						
	Total	**Under $250K**	**$250K to Under $1 Million**	**$1 Million to Under $2.5 Million**	**$2.5 Million to Under $10 Million**	**$10 Million +**
"ANY" Design/Build or Design/Assist Work (2005)	79%	68%	=	<86%	<90%	<96%
"ANY" Design/Build Work (2003)	83%	81%	=	=	=	<90%

Average Revenue from Design/Build or Design/Assist Work

On average, Design Build or Assist work accounts for 43% of electrical contractors' revenue.

- The findings by company revenue also suggest changes in the nature of Design/Build or Assist work. In 2005, Design Build or Assist work accounted for a higher percentage of revenue for larger firms (defined as 10-19 and 50+) than in 2003 and a somewhat lower percentage of average revenue for firms with 1-9 employees compared with two years earlier.



↓↑ -- Arrow indicates a significant difference at the 90% confidence level

Types of Work Performed

…CII Vs. Residential

Almost all electrical contracting firms that work on a Design/Build or Assist basis worked on Commercial/Industrial/Institutional (CII) projects (93%); 78% of these electrical contractors worked on Residential projects in 2005 (not shown).

Sources of Revenue

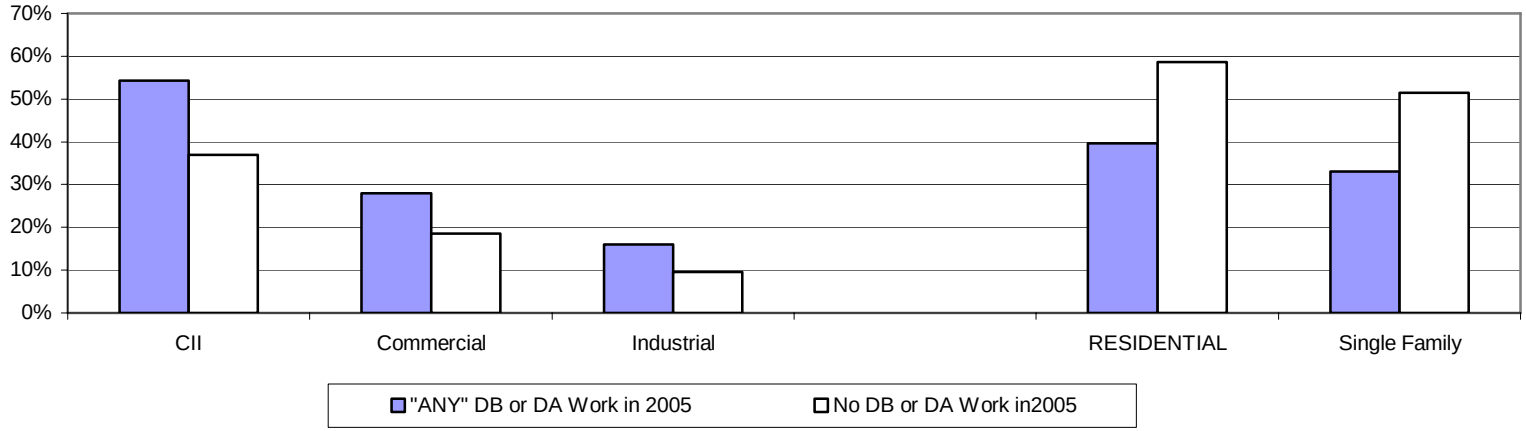
- Moreover, firms that work on a Design/Build or Design/Assist basis derive a higher percentage of their *revenue* from *CII* work compared with electrical contractors that do **not** work on a D/B or D/A basis. In contrast, firms that do **not** perform any design services derive a higher percentage of work from *Residential* projects – particularly single family housing.

  - These findings are consistent with the fact that larger firms are even more likely than smaller firms to perform DB or DA work (and it is larger firms that are more likely to work on CII projects).

  - These findings are consistent with the 2003 results.

Average Revenue in 2005 from CII and Residential Projects

(All of the differences shown below are significant at the 90% confidence level)



Types of Work Performed

…By Sectors (New Vs. Rehab Vs. Maintenance/Repair)

Firms that worked on a Design/Build or Design/Assist basis in 2005 were well represented in each of the three major construction sectors, as shown below.

- In fact, electrical contracting firms that worked on a D/B or D/A basis in 2005 were significantly more likely to have done work in *each* of the major construction areas: New, Modernization/Retrofit and Maintenance/Repair.
    - In contrast, in 2003, electrical contracting firms offering design services were more likely to have worked in two of the three areas: Modernization/Retrofit and Maintenance/Service/Repair, but not New construction.

Electrical Contracting Firm Has Done "ANY" of This Work

	2005			2003		
	Total	**Do "ANY" Design/Build Work**	**Do No Design/Build Work**	**Total**	**Do "ANY" Design/Build Work**	**Do No Design/Build Work**
ANY New Construction	87%	**91%>**	72%	87%	=	=
ANY Modernization/Retrofit	86%	**88%>**	77%	86%	**89%>**	66%
ANY Maintenance/Service*/Repair	90%	**92%>**	85%	92%	**94%>**	83%
Maintenance (Asked as a separate category in 2006)	75%	**79%>**	59%	NA	NA	NA
Repair (Asked as a separate category in 2006)	83	**=**	=	NA	NA	NA

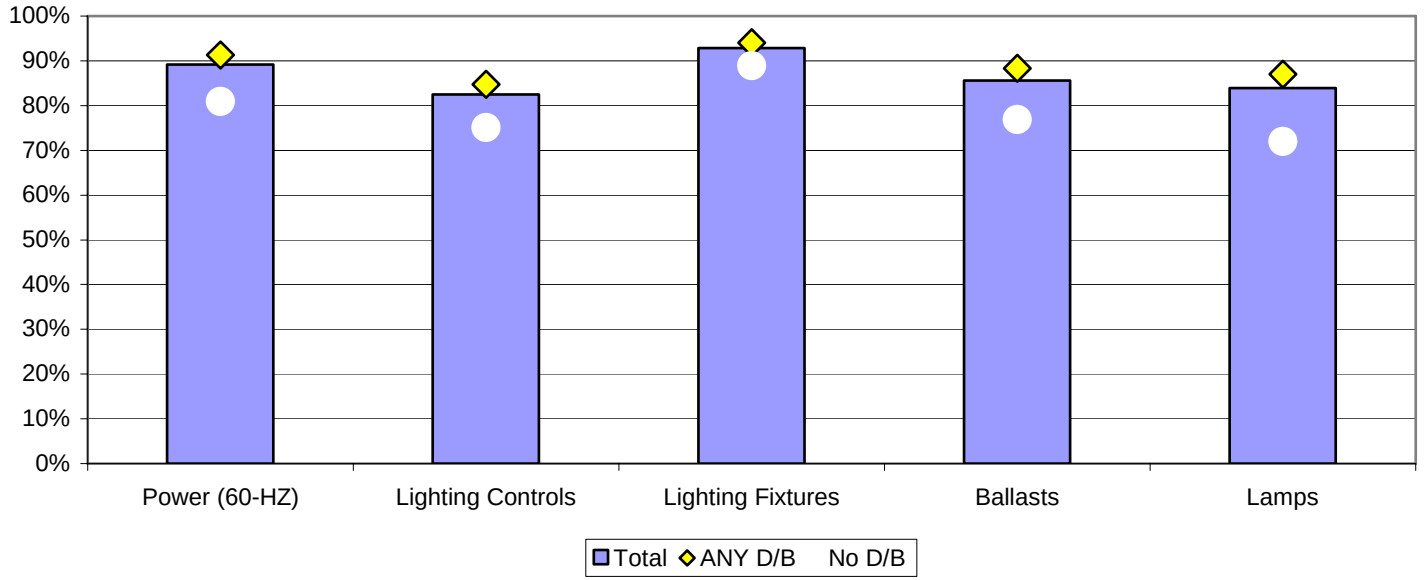
* "Service" was not asked in the 2006 Profile Study

Types of Work Performed
…By Categories: Power and Lighting

Electrical contracting firms that worked on a Design/Build or Design/Assist basis in 2005 were…

- significantly more likely to have worked in *each* of the aspects of Traditional Power/Lighting compared with those who did not do any Design/Build or Design/Assist work in 2005.
    - The higher participation in these categories by those performing D/B-A work was also the case in 2003(not shown).

Types of Work Performed in 2005: Power and Lighting
(All of the differences shown below are singificant at the 90% confidence level)

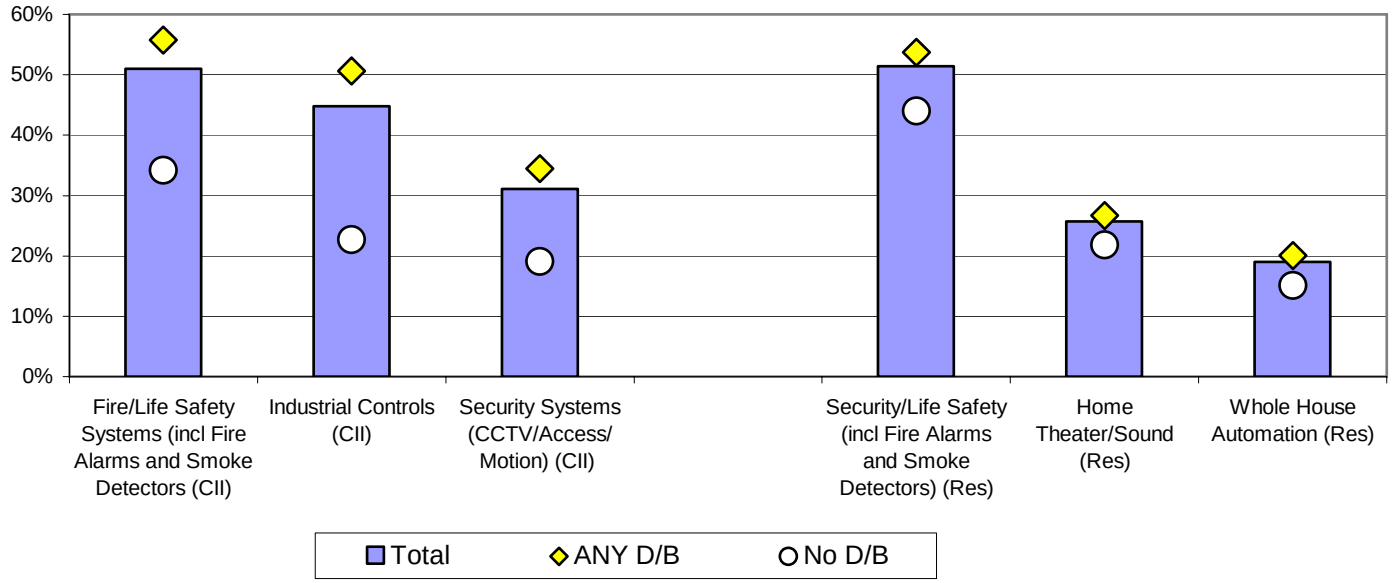


Types of Work Performed
…By Categories: Automation/Controls Systems

Electrical contracting firms that worked on a Design/Build or Design/Assist basis in 2005 were…

- significantly more likely to have worked in *all* of the aspects of Automation/Controls – both CII and Residential -- than those who did no Design/Build or Design/Assist work in 2005.
    - This was not fully the case in 2003. While electrical contractors that worked on a DB-A basis were significantly more likely to have worked on Fire/Life Safety (CII) and Security Systems/CCTV (CII) there was no significant difference in terms of working on Residential Controls (not shown). Industrial Controls was not asked in 2003 and thus cannot be trended.

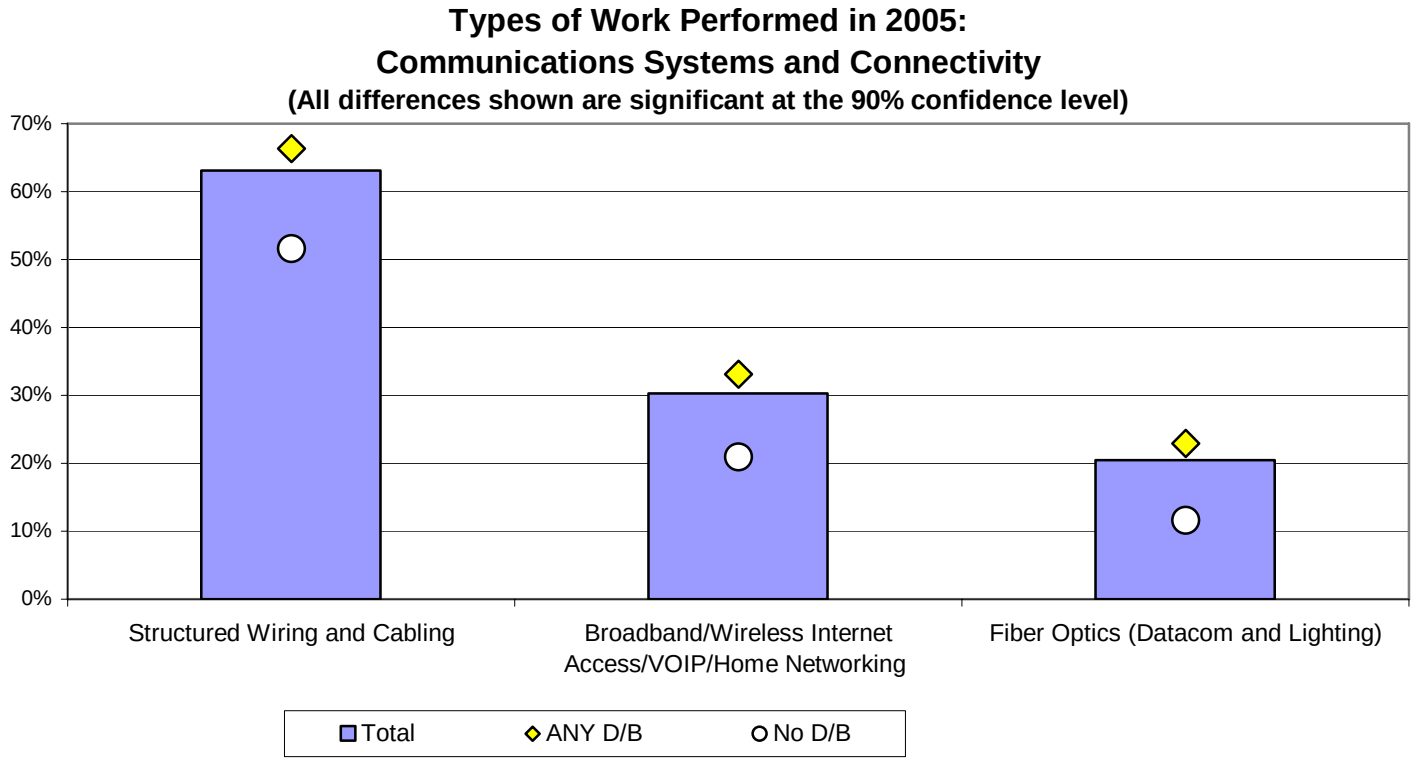
Types of Work Performed in 2005:
Automation/Controls-- CII and Residential
(All differences shown are significant at the 90% confidence level)



Types of Work Performed
…By Categories: Communications Systems and Connectivity

Electrical contracting firms that worked on a Design/Build or Design/Assist basis in 2005 were…

- significantly more likely to have worked in all aspects of Communications Systems and Connectivity than those who do **not** work on a Design/Build or Design/Assist basis.
    - Only one of the three categories – Fiber Optics (Datacom and Lighting) – was asked in the same way in 2003. In that case, there was no difference by whether the respondent worked on a DB-A basis or not (not shown).

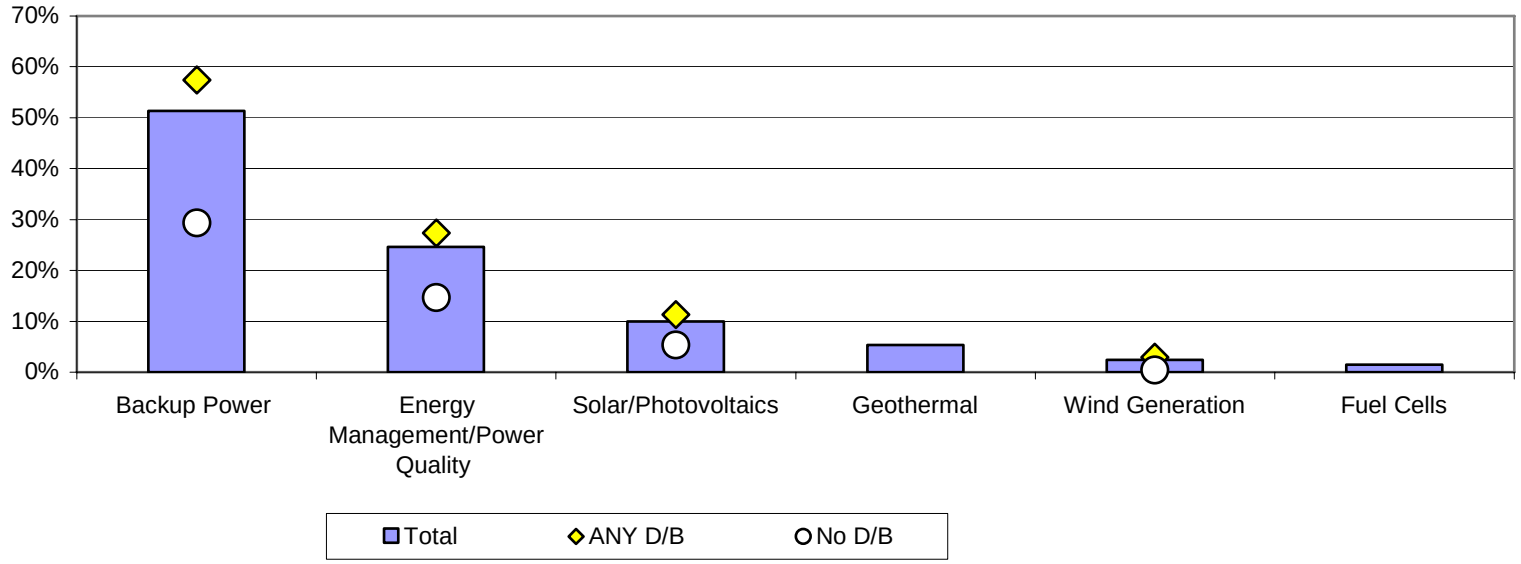


Types of Work Performed
…By Categories: Power Quality and Alternative Energy

Electrical contracting firms that worked on a Design/Build or Design/Assist basis in 2005 were…

- significantly more likely to have worked on Power Quality and/or in Photovoltaics and/or Wind Generation than those who did not do Design/Build projects.
    - This was not fully the case in 2003. While electrical contractors that worked on a DB-A basis were significantly more likely to have worked on Power Quality and Backup Power, there was no significant difference in terms of working on Alternative Energy projects in 2003 (not shown)**.**

Types of Work Performed in 2005: Power Quality and Alternative Energy
(All differences shown are significant at the 90% level of confidence)



Specifications
Completeness of Plans and Specs – Compared to Five Years Ago

For each of the building types shown on the next page, electrical contractors who work on a Design/Build or Design/Assist basis are significantly more likely to say that the plans and specs that they *now* receive are **less** complete compared with what they received five years ago. This finding is further confirmation of the integral role played by those who provide design services and is another indication of the expanded responsibilities given to electrical contractors who work on a Design/Build or Design/Assist basis.

- This finding holds for each of the three building types shown on the next page: Single Family, Multifamily and CII (Commercial/Industrial and Institutional).

In contrast, the electrical contractors who do **not** provide design services are more likely to say that the plans and specs for Single Family and for CII projects are "no different" than they were five years ago. Note that neither group is significantly different from the other on plans and specs are "more" complete.

This question was first asked in the 2006 Profile Study and cannot be trended.

	Plans and Specs Received Compared to Five Years Ago Among Those Who Work In This Building Type…		
	Total	**Do "ANY" Design/Build Work**	**Do No Design/Build Work**
	%	%	%
Single Family			
Less Complete	22	**26>**	8
No Different	53	50	**<66**
More Complete	22	**=**	=
Multi-Family			
Less Complete	21	**23>**	9
No Different	53	=	=
More Complete	24	=	=
Commercial/Industrial/ Institutional			
Less Complete	28	**32>**	14
No Different	42	41	**<50**
More Complete	19	=	=

How Products are Specified

Almost 8 in 10 of the specifications given to electrical contractors are “multiple” or “or equal” or “performance specified” which is another indication of contractors’ ability to select brands.

- Electrical contractors that work on a Design/Build or Design/Assist basis are slightly, but significantly even more likely to have brand choice.

Percent of Specifications That Are…			
	Total	**Do "ANY" Design/Build Work**	**Do No Design/Build Work**
	%	%	%
Single Brand	23	=	=
More than One Brand	77	**78>**	76
Multiple	29.6	=	=
“Or Equal To”	35	**36>**	28
Performance Specified	12.8	=	=

Role of Brand and Manufacturer When Configuring or Working on Systems

It is notable that electrical contractors working on a Design/Build or Assist basis are even more likely than those who do no D/B or D/A work to 'try to stay within a single brand' or 'single manufacturer when working on or designing systems where a Multiple, or Equal or Performance specification is indicated.'

Role of Brand and Manufacturer When Configuring or Working On Systems			
	Total	**Do "ANY" Design/Build Work**	**Do No Design/Build Work**
	%	**%**	%
Single brand or manufacturer	55	**58>**	48
Try to stay within a single **brand**	33	34	32
Try to stay within a single **manufacturer**	22	**24>**	16
It depends on the situation	45	42	**<52**

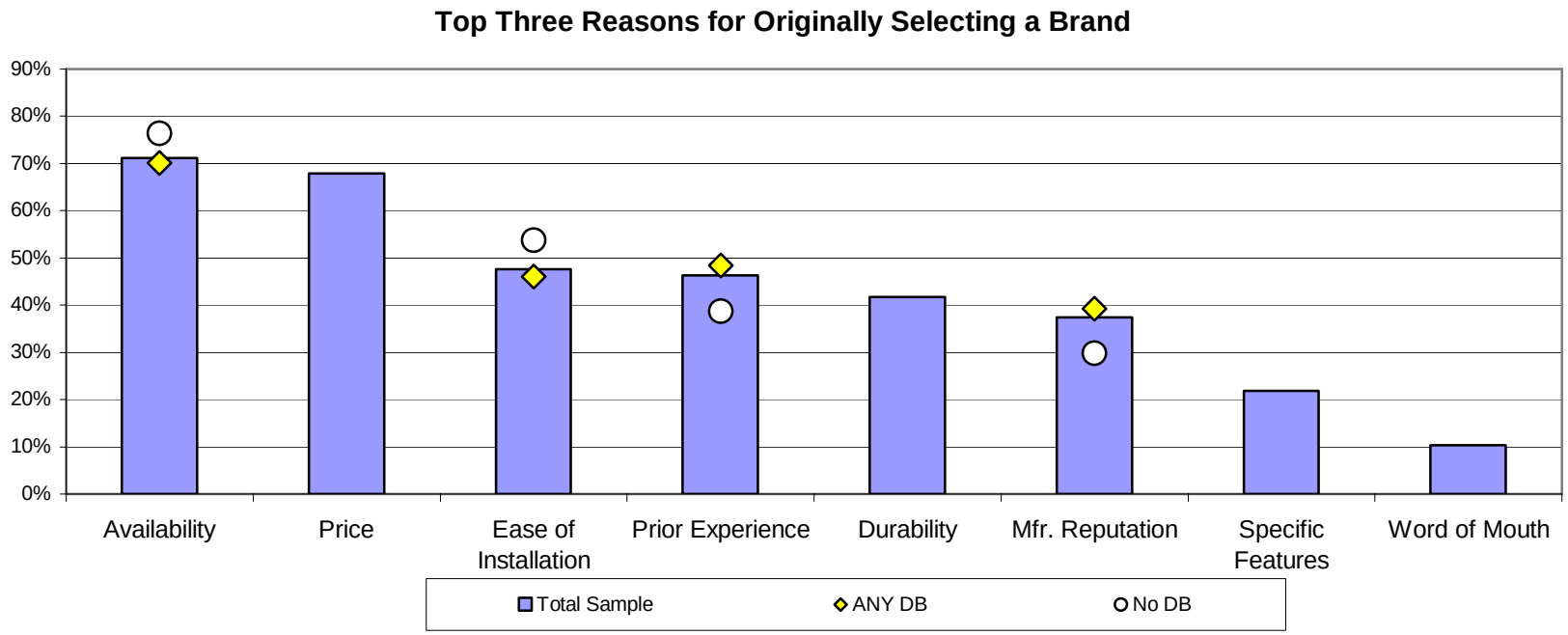
Interestingly, when asked about the ability to make a brand substitution when a single brand is specified, those who do **not** work on a Design/Build or Design/Assist basis are somewhat more likely to be successful in making a brand substitution when a single brand is specified 60% compared to 52%). Those who work on a DB-A basis and those who do not work this way are equally successful in making a brand substitution where a 'Multiple or Equal or Performance' spec is indicated.

Main Reasons for Original Brand Selection

Electrical contractors that work on a Design/Build or Design/Assist basis are more likely than those who do Design Build or Assist work to rely on “Prior Experience” and “Manufacturer Reputation” in their original brand selection.

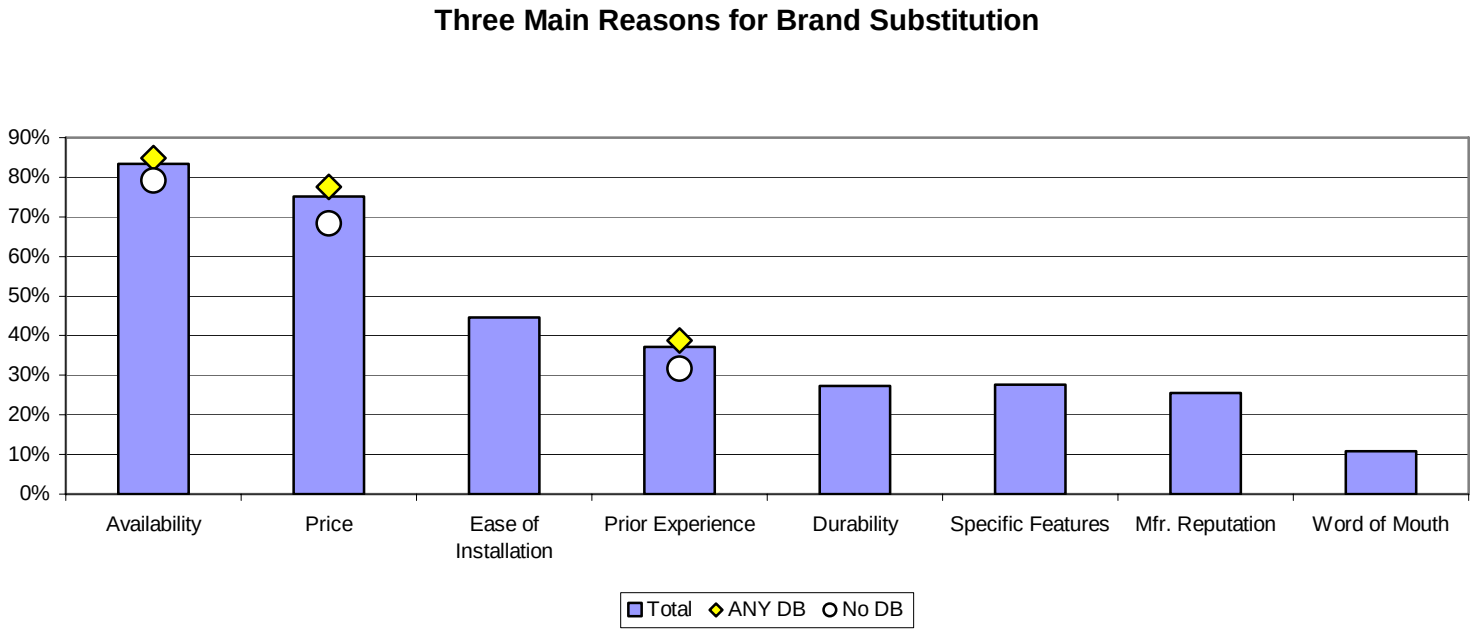
In contrast, electrical contractors not working on a DB or DA basis give slightly, but significantly more weight to “Availability” and “Ease of Installation”.

- Note that there are no statistically significant differences on the other four attributes.



Main Reasons for Brand Substitution

In contrast, when a brand substitution must be made, electrical contractors that work on a DB or DA basis are more likely than those who do not work this way to consider “Availability” and “Price”, but also “Prior Experience”.



Purchase of Materials for Installation

Electrical contractors that work on a Design /Build or Design/Assist basis are slightly, but significantly more likely than those who do not work this way to buy directly from the manufacturer and less likely to buy from Warehouse Home Centers.

- In this way, they mirror the behavior of firms with 10+ employees rather than electrical contractors with 1-9 employees..

Purchase of Materials for Installation			
	Total	**Do "ANY" DB Work**	**Do No DB Work**
	(1144)	(901)	(225)
	%	%	%
Traditional Electrical Distributor	74	=	=
Warehouse Home Center (Home Depot, Lowe's, etc.)	15	14	**<20**
Direct from Manufacturer	6	**6>**	4
Specialized Low Voltage Systems Distributor (Telcom, Security, Datacom)	5	=	=

Training

Electrical contracting firms that work on a DB-A basis are far more likely than firms that don't offer design/build or assist services to plan to seek training within the next 12 months (65% vs. 50%) and are also more likely to say that they will take the following types of training: NEC changes, Green/sustainable technology and LEED Certification.

Future Training			
	Total	**Do "ANY" DB Work**	**Do No DB Work**
	(388)	(302)	(76)
	%	%	%
Will Seek Training in the Next 12 Months	62	**65 >**	50
Types of Training Sought			
NEC Changes	75	**77>**	60
Green/sustainable technology	12	**14>**	3
LEED Certification	5	**5>**	0

Those who work on a Design/Build or Design/Assist basis were also more likely to have taken the following types of training in the past 12 months:

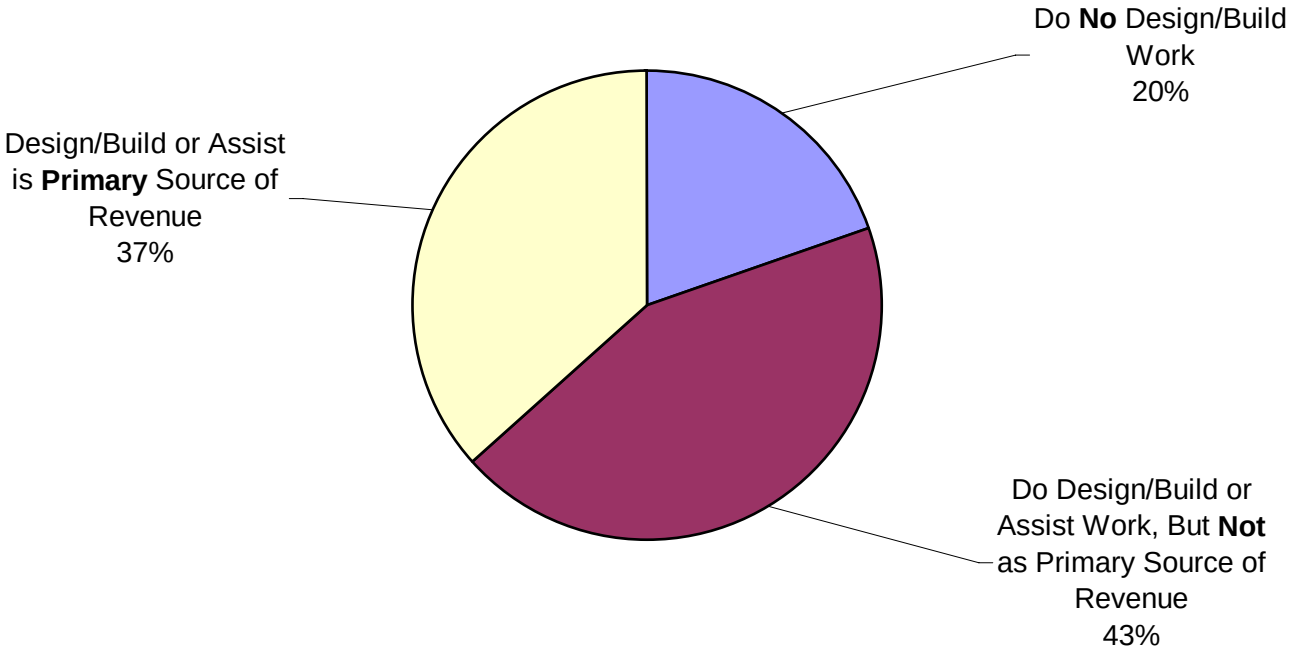
- Power Quality
- LEED Certification

(The questions on Future Training were asked only of a third of the total sample)

When Design/Build or Design/Assist is the *Primary* Source of Revenue

Design/Build or Assist projects are the *primary* source of revenue for 37% of electrical contractors. This is comparable to the 39% reported two years ago.

- On average, Design/Build or Design/Assist work accounts for a whopping 82% of revenue for electrical contractors who work *primarily* on a Design/Build basis and is unchanged from the findings from two years ago (not shown).



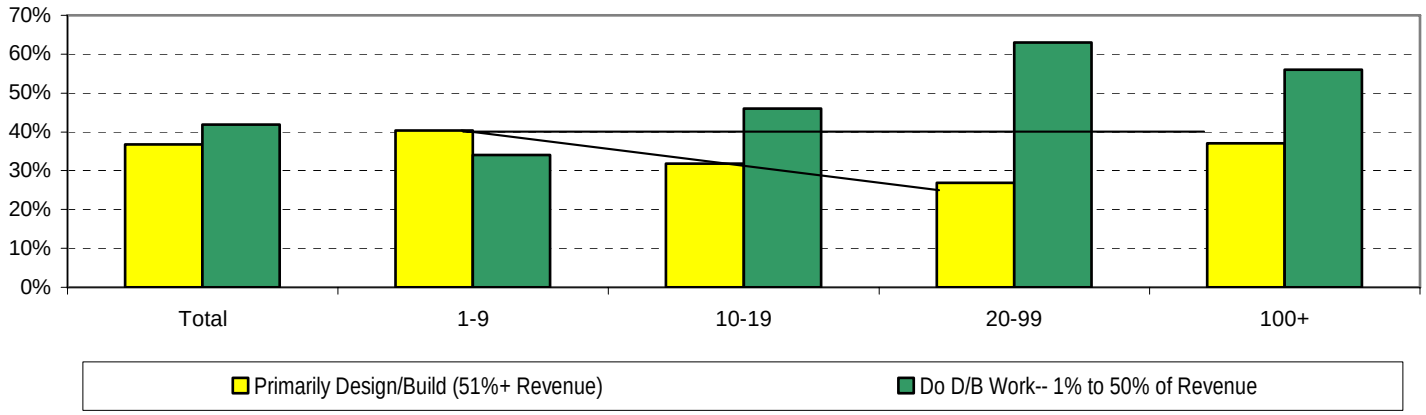
Who Works Primarily on a Design/Build or Design/Assist Basis?

…By Number of Employees

As noted earlier in the report, while electrical contracting firms of all sizes have done (ANY) work on a Design/Build or Assist basis, small firms (defined as having 1-9 employees) are the **most** likely to work *primarily* on a Design/Build or Assist basis, while firms with 20-99 employees are the **least** likely to do so.

- Note, however that 37% of electrical contracting firms with 100+ employees say that they work *primarily* on a DB-A basis.
    - The percentage of very large firms that report working *primarily* on a DB-A basis (37%) is significantly higher than two years ago when it was 24% (2003 results are not shown).
    - In effect, working *primarily* on a DB-A basis appears to be the province of extremes –on the one side, small electrical contracting firms (with 1-9 employees) and, on the other side of very large firms (100+ employees).

Percentage of Firms Working Primarily on a Design/Build or Assist Basis in 2005
(By Number of Employees)

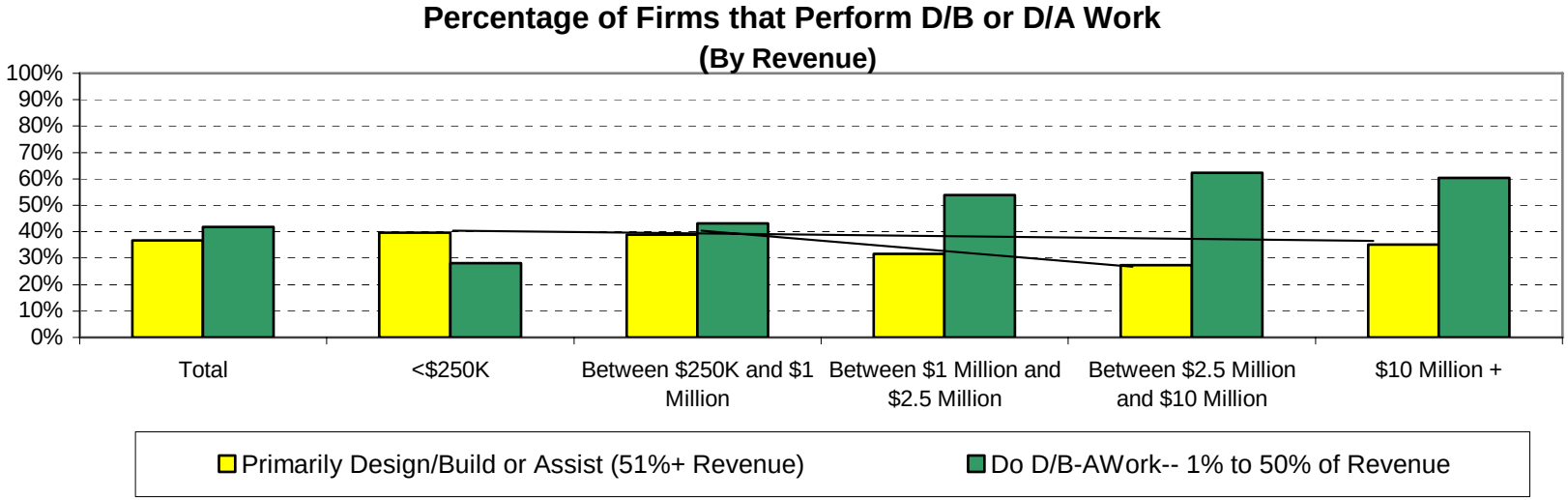


…By Annual Revenue

Similarly, when size is defined by revenue, small firms (defined as having revenue below $250K) are most likely to work *primarily* on a Design/Build or Design/Assist basis. However, note that more than one-third of electrical contracting firms with revenues of $10 million or more say that they work *primarily* on a Design/Build or Assist basis (35%).

- The percentage of very large firms (revenues of $10 million or more) that report working primarily on a D/B or D/A basis is significantly higher in 2005 (35%) than it was in 2003, when it was 21%. (2003 results are not shown)

- In effect, working *primarily* on a DB-A basis appears to be the province of extremes –on the one side, firms with revenues of under $1 million and, on the other side, of firms with revenues of more than $10 million.

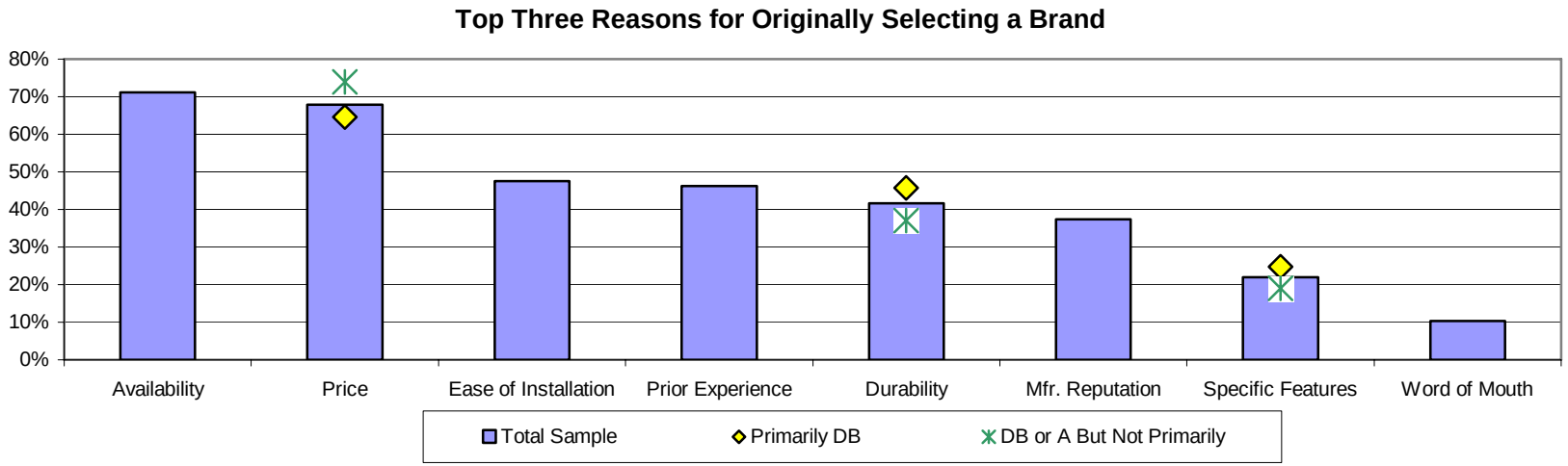


Compared to two years ago, there are fewer and less dramatic differences between firms that work on a DB basis (where DB-A accounts for less than one-half their revenue) and firms whose revenue comes *primarily* from DB-A. This is not surprising given that firms of different sizes derive more than one-half of their revenue from Design/Build or Design/Assist work.

Main Reasons for Original Brand Selection

Electrical contractors that work *primarily* on a DB or DA basis are more likely than those for whom DB-A work is less than half their revenue to place higher importance on "Durability" and "Specific Features" and *less* on "Price".

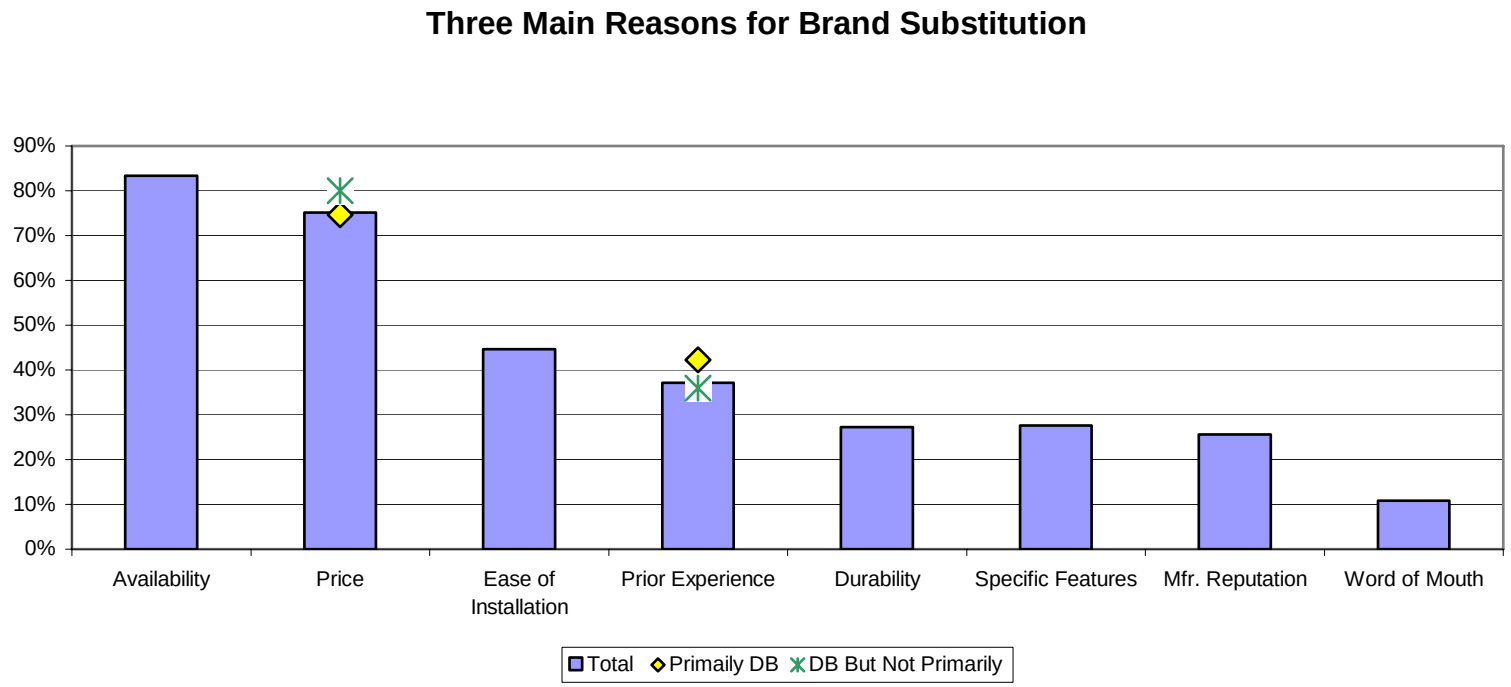
- Note that there are no statistically significant differences on the other five attributes.



Main Reasons for Brand Substitution

Electrical contractors that work *primarily* on a DB or DA basis are more likely than those for whom DB work is not the primary source of their revenue to place higher importance on "Prior Experience" and, as in the case of the main reasons for originally selecting a brand, less emphasis on "Price".

- Note that there are no statistically significant differences on the other six attributes.



Training

Electrical contracting firms that work *primarily* on a DB-A basis are far more likely than firms that don't offer design/build or assist services to have taken following types of training: NEC changes, Grounding/Bonding and/or Green/sustainable technology.

Future Training			
	Total	**Primarily DB Work**	**No DB Work**
	%	%	%
NEC Changes	75	**85>**	60
Grounding/Bonding	40	**49>**	37
Green/sustainable technology	12	**19>**	3