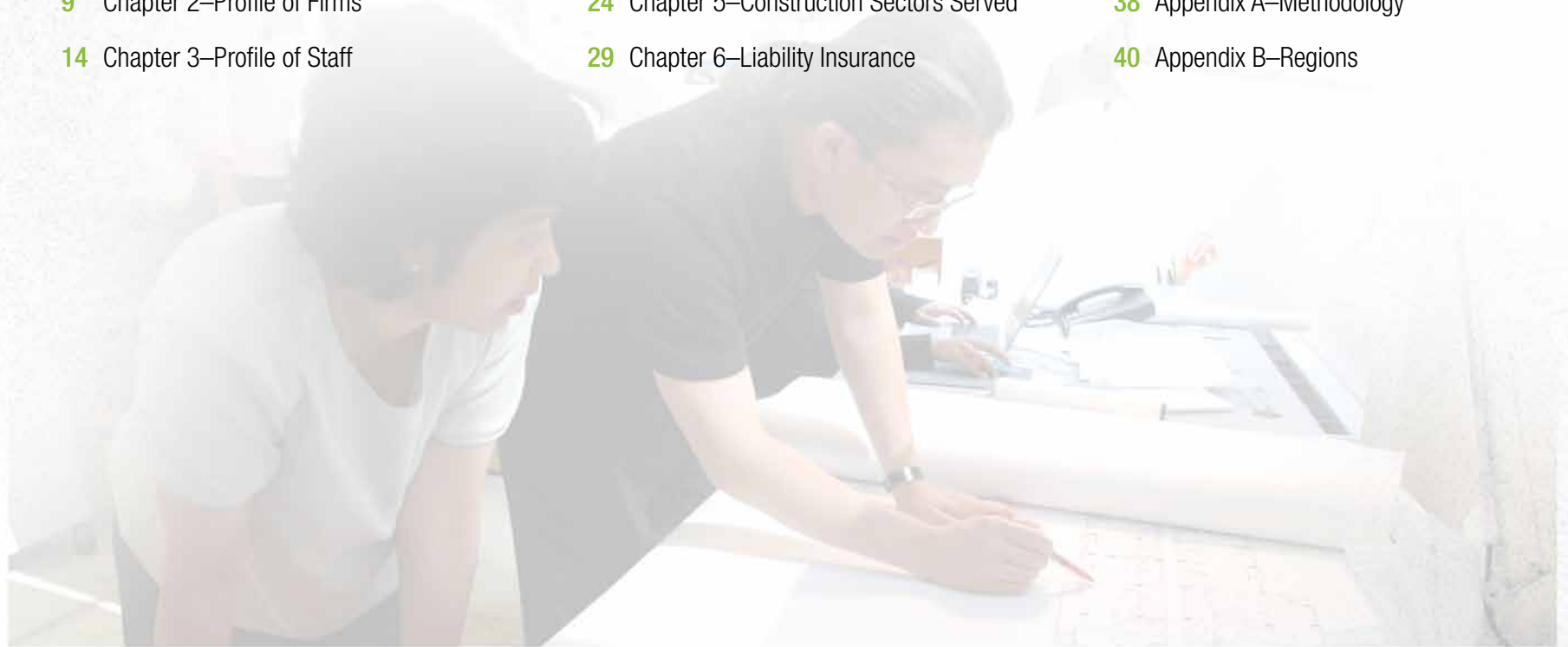






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The downturn in the national economy that began in early 2008 has had serious repercussions for the design professions. Revenue and employment at U.S. architecture firms fell sharply beginning in mid-year 2008, and is only now beginning to recover. This report looks at the current situation regarding the practice of architecture in the U.S., and ways that it has changed in recent years.

- The severe national economic downturn over the past few years has caused a significant downsizing at architecture firms.

- During the downturn, architecture firms expanded the services they offered and the sectors they served in an effort to secure new projects.

- Until the construction recovery strengthens, firms will be hesitant to fill full-time positions, relying more heavily on part-time and contract staff.

In an effort to document emerging trends in the practice of architecture, the American Institute of Architects periodically has conducted comprehensive surveys of its member-owned firms. These *Business of Architecture* reports present benchmarks that allow firms to assess their practices and evaluate their operations in comparison to their peers. In this way, the architecture profession can monitor its current performance while pursuing shared goals for the larger architecture community. This document reports on responses from more than 2,800 architecture firms to a scientifically selected survey of more than 10,000 architecture firms. During the survey, conducted in early 2012, firms provided information on characteristics and operations in 2011. The analysis in part compares these results to earlier surveys to assess how the profession is changing. Generally, firm activity is compared and contrasted by the size of the firm (number of employees on payroll), the region of the country, and

the construction sector concentration of the practice (residential, commercial/industrial, and institutional) for those firms that received 50 percent or more of their annual revenue from one of these three sectors. Unless otherwise specified, all information in this report was generated by the American Institute of Architects.

#### THE GREAT RECESSION WINDS DOWN

The national economic expansion that began in late 2001 reached a peak at the end of 2007. The tail end of that expansion saw healthy growth in the economy, and with it even stronger growth in most nonresidential construction sectors. However, at the very end of this upturn the overall construction sector was seeing more modest growth. The housing market peaked much earlier in the cycle—the beginning of 2006 was the high-water mark of the cycle for home building—and declines after that offset gains in the nonresidential construction sector over the 2006–2008 period.

Once the downturn hit in early 2008, the construction sector of our economy experienced steep declines. And even though overall economic output began recovering nationally by the middle of 2009, construction activity continued to spiral downward. Total construction spending levels, which exceeded \$1 trillion in 2008, fell to under \$800 billion by 2011.

With less construction came less building design. Additionally, there were efforts by owners and developers to more aggressively manage design and construction costs of the projects that were built, creating pressure on design fees and construction bids. As a result, gross revenue at architecture firms declined from more than \$44 billion in 2008 to \$26 billion by 2011, a 40 percent decline over this three-year period (figure 1.1).

Such a significant reduction in firm revenue produced a comparable reduction in employment. Nationally, the decline in overall business payrolls throughout the economy over this period was one of the steepest since the Great Depression. From its high in early 2008 to its low in early 2010, almost 8.8 million payroll positions, or 6.4 percent of the workforce, disappeared. However, by the end of 2011 more than a third of these losses had been recovered.

Construction, a more cyclical sector of our economy, saw even steeper losses proportionately. Construction payrolls peaked in early 2007 and steadily declined through mid-2011 due to the housing downturn. Since then, there has been hardly any recovery. Between 2007 and 2011, payrolls in this industry declined by more than 2.1 million—almost 28 percent—double the number of construction positions added during the 2003–2007 upturn.

Positions at architecture firms have generally followed the path of the broader construction industry. Due to the heavy reliance of architecture firm revenue on nonresidential construction activity, payroll positions continued to grow through mid-2008. They then dropped sharply through early 2011 and have hardly recovered since that point. Between 2007 and 2011, more than 28 percent of positions at architecture firms disappeared, a share

figure 1.1

## DECLINE IN REVENUE AT ARCHITECTURE FIRMS HAS EXCEEDED CONSTRUCTION DOWNTURN OVER THE PAST THREE YEARS

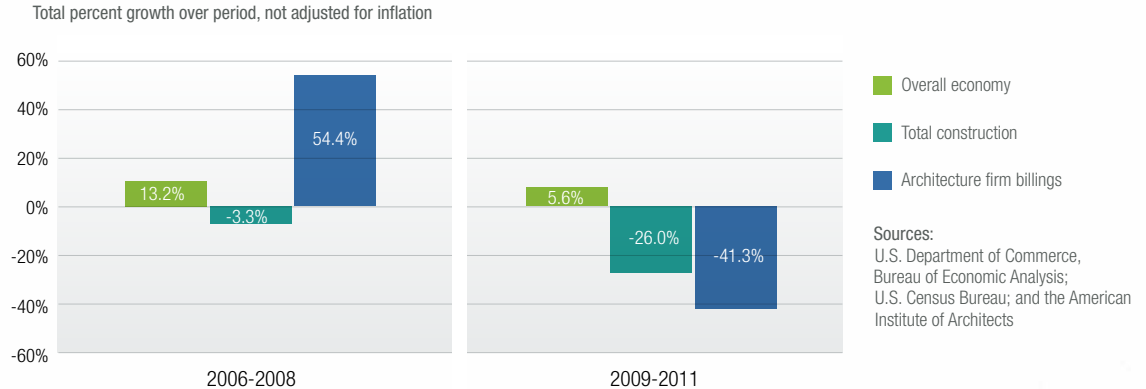
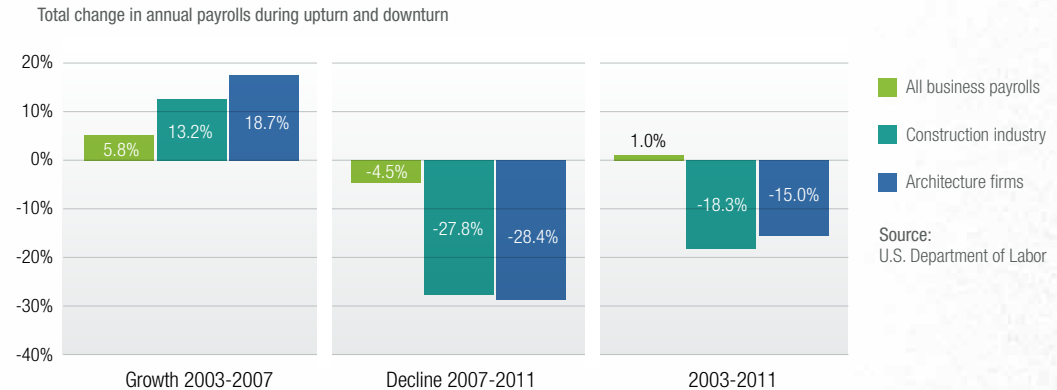


figure 1.2

## EMPLOYMENT AT ARCHITECTURE FIRMS STILL BELOW LEVELS WHEN LAST UPTURN BEGAN





that greatly exceeded the gains during the earlier upturn (figure 1.2).

### CHANGES AT ARCHITECTURE FIRMS

This dramatic upheaval at architecture firms has had dramatic implications for professional practice. One change is the mix of projects at firms. Surveys of architecture firm activity over the past decade show that there has been considerable fluctuation in the share of project activity across the major construction sectors. Residential projects tend to increase early in a cycle, commercial/industrial projects in mid-cycle, and institutional projects later in the cycle.

Billings for residential projects averaged 14 percent of total firm billings over the past decade, commercial/industrial 27 percent, and institutional 53 percent, with the remaining 6 percent divided among other construction and nonconstruction activities. By 2011, residential billings had returned to their decade average, having grown to 18 percent in 2005 during the peak of the housing market and fallen to 11 percent in 2008 as the housing market was just beginning to peak. Even though housing remained relatively weak through 2011, multifamily activity—a critical residential sector for architecture firms—was building momentum and was a growing share of design activity for residential projects.

Commercial/industrial design activity tends to be extremely volatile over the cycle. Activity fell off sharply with the overall economic downturn and was still near its bottom in 2011. As a result, the share of design billings from this sector was below its decade average that year. Institutional activity tends to be more stable over the cycle. This means that shares are generally a bit lower during upturns and higher during downturns. By 2011, the institutional share was near its decade high, mostly because other sectors had fallen off more dramatically (figure 1.3).

With the overall decline in project activity during the downturn, coupled with the changing mix of projects, came an expansion of services that the typical firm offered to its clients. During upturns, large firms typically continue to offer a full range of design services to clients, while small firms often offer niche services in a smaller number of specialties. During downturns, firms of all sizes tend to expand into new areas in the process of looking for active projects. So, even though firms had fewer employees on average in 2011 than during the boom years, higher numbers of firms responded that they offered such services as sustainable design, planning, interior design, and space planning. A related trend is that a growing number of firms categorize themselves as multiple-discipline design firms, up almost 10 percentage points over the past decade.

*figure 1.3* COMMERCIAL SHARE CURRENTLY BELOW, INSTITUTIONAL SHARE ABOVE, DECADE AVERAGES

Share of gross billings at architecture firms by type of construction

Firm type	2002	2005	2008	2011	Average over past decade
Residential *	12%	18%	11%	14%	14%
Commerical **	28%	27%	29%	24%	27%
Institutional ***	52%	49%	53%	58%	53%
Other construction	5%	4%	6%	2%	4%
Nonconstruction	3%	2%	1%	2%	2%

Notes:

\* includes single-family and multifamily construction, and home improvements

\*\* includes office, retail and other commercial, hotel/hospitality, manufacturing, and distribution facilities

\*\*\* includes education, health care, justice, other government, religious, cultural, recreational, and transportation facilities

The overall loss of payroll positions during this downturn has been greater than the closures of architecture firms. As a result, the average number of payroll employees at a typical firm increased from 10.0 in 2005 to 10.3 in 2008 before decreasing to 8.8 in 2011. Currently, according to AIA estimates, almost a quarter of architecture firms nationally are sole practitioners and more than 60 percent have fewer than five employees on their payrolls. In contrast, only 1.4 percent of offices<sup>1</sup> have 100

or more employees. In 2008, 51 percent of firm offices had fewer than five employees, while 2 percent had 100 or more.

Even though firm counts are heavily weighted toward small businesses, many design professionals work in large-firm environments. Firm locations with 100 or more employees account for more than 20 percent of all staff at architecture firms nationally, and 50-plus employee firms account for more than a third of

<sup>1</sup> If a firm had more than one location, survey respondents were asked to provide information for their office, not for the overall firm. The number of employees, therefore, applies only to their office.

all employment. Since revenue per employee tends to be higher at large firms, 100-plus person firms account for more than a quarter of professional fees generated nationally, while fifty-plus person firms account for well over 40 percent.

Net revenue per employee averages almost twice as much at large firms than at small firms, in part reflecting the greater use of part-time staff at small firms, but also most likely reflecting higher chargeability rates at large firms, as well as higher levels of staff productivity due to generally greater capital investments (figure 1.4).

#### ONGOING FRAGMENTATION IN THE ORGANIZATION OF FIRMS

As in previous recessions, this downturn has produced greater fragmentation at architecture firms. Firm layoffs have pushed down average firm sizes, and unemployed architects are a common source of new start-ups. Due to the ongoing “feast or famine” in project revenue for architecture firms, there are unusually high shares of business start-ups and failures in the profession, reflected in the low average age of firms.

According to this survey, more than a third of firms nationally were founded since 2000, and 60 percent were founded since the last significant downturn in the profession in 1990. Only 10 percent of firms were in existence prior to 1970. In an era in

*figure 1.4* | **EVEN WITH BENEFITS TO SCALE IN THE PROFESSION, MOST ARCHITECTURE FIRMS REMAIN SMALL**

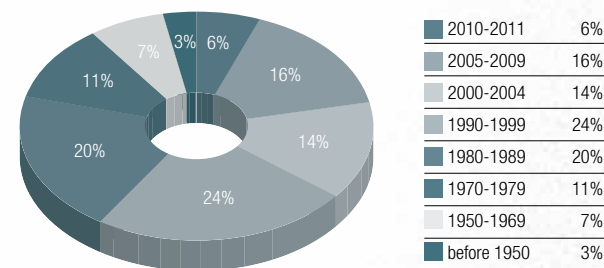
Share of total firms, staff, and gross billings in the profession by firm size, 2012

Firm size (number of employees)	Share of firms	Share of staff	Share of billings	Net revenue per employee
1 employee	26%	3%	2%	\$70,000
2–4 employees	37%	12%	8%	\$74,000
5–9 employees	18%	13%	11%	\$95,000
10–19 employees	10%	15%	14%	\$113,000
20–49 employees	6%	20%	22%	\$132,000
50–99 employees	2%	15%	16%	\$136,000
100+ employees	1%	22%	27%	\$138,000
All firm average				\$86,000

which access to credit is very difficult, particularly for businesses without a long track record; in which repeat clients and established institutional relationships are important sources of new project activity; and in which staff development—including formal intern development programs—extends for many years; high levels of staff turnover and business failures can have a devastating long-term effect on the profession (figure 1.5).

*figure 1.5* | **NATIONALLY, ABOUT A THIRD OF FIRMS WERE FOUNDED OVER THE PAST DECADE**

Year firm founded



The general downsizing of firms has also produced a change in staff compositions. In the 2009 AIA *Business of Architecture* report—reflecting staff composition at the beginning of that year—60 percent of payroll positions were architecture positions (including interns and students), 21 percent were other design professionals (with engineers and interior designers accounting for the largest shares), and the remaining 19 percent were technical and support staff.

By the beginning of 2012, there were some significant changes to this composition. The largest losses were in technical and nontechnical staff, positions that generally were not directly billable on projects. Architecture staff positions increased their share somewhat over this period, while the share of other design professionals remained essentially unchanged (figure 1.6).

These summaries of payroll staff compositions may somewhat overstate the actual changes that occurred over this period. Many firms replaced or converted payroll positions to contract positions, which generally don't offer benefits and typically limit the number of hours worked to immediate project needs. In other cases, full-time workers were cut back to part time, or full-time positions were replaced with part-time positions. Many of these part-time and contract positions may be converted to full time when workloads recover. ■

*figure 1.6* | DURING THIS PAST DOWNTURN, ARCHITECTURE FIRM STAFFING SHIFTED TOWARD SENIOR ARCHITECTURAL POSITIONS AND AWAY FROM NONBILLABLE SUPPORT POSITIONS

Averages across all architecture firms weighted by number of positions

	2006	2009	2012
<b>Architecture staff</b>			
Principals/partners*	16%	17%	19%
Licensed	15%	15%	17%
Nonlicensed graduates**	14%	16%	13%
Interns/students	18%	12%	16%
<b>Other design professionals</b>			
Engineers	5%	7%	6%
Interior designers	5%	5%	6%
Landscape architects	1%	1%	1%
Planners	1%	1%	1%
Other design/nondesign professionals	7%	7%	8%
<b>Technical/nontechnical***</b>			
Technical	5%	5%	2%
Nontechnical	13%	14%	11%

Notes:

\* principals/partners categorized as architecture staff; some may be nonarchitects

\*\* nonlicensed graduates of accredited architectural programs not currently on licensure path

\*\*\* includes nonbillable technical and administrative staff





- More than one-third of firms describe their firm as a multidisciplinary practice with architecture as the lead discipline, while the share of single-discipline firms continues to decline.

- The share of firms registered under the sole proprietorship legal business structure is now just 20 percent, down from more than 50 percent of firms 15 years ago.

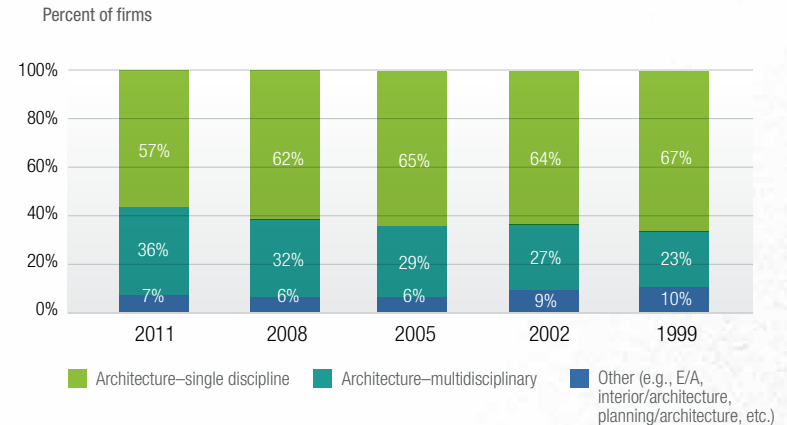
- Large firms with multiple offices report having fewer offices in 2011 than in 2008.

The economy is going through a transformation, and so is the architecture industry. The share of architecture firms that describe their practice as single discipline continued to decline in 2011, falling below 60 percent, as more than one-third of firms report that they are now multidisciplinary (with architecture as the lead discipline) versus just over one-quarter a decade ago. (figure 2.1)

Firms may tend to add other disciplines to their practices at the peak of the economy. They may also try to find additional work by adding other disciplines during an economic downturn, even though they often cannot add additional staff.

In 2011, nearly two-thirds of firms with fewer than 10 employees and one-third of firms with 10 to 49 employees described their practice as single-discipline. The share of multidisciplinary architecture firms has doubled in the last 15 years, from 18 percent in 1996 to 36 percent in 2011. More than four in five firms with 50 or more employees now characterize themselves as multidisciplinary, although it is firms with fewer than 10 workers that have shown the most growth into multidisciplinary practices.

figure 2.1 | SINGLE-DISCIPLINE ARCHITECTURE FIRM SHARE CONTINUES TO DECLINE



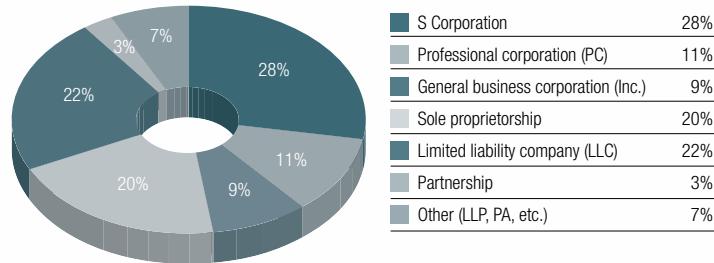
**THE S CORPORATION IS THE MOST WIDELY EMPLOYED BUSINESS STRUCTURE**

When starting a business, one of the first decisions the owner has to make is the type of legal entity to create. The business type that is best suited to the firm's situation and objectives may vary by firm size or specialization. Liability protection and tax concerns may also play a major role in this decision. According to the Internal Revenue Service, 70 percent of all businesses start out as sole proprietorships, since they are relatively easy to start and give the owner discretion in making decisions. On the downside, these firms have unlimited liability for all debts against the business, including personal assets.

The share of architecture firms that use the sole proprietorship legal structure has continued to decline in recent years, with a drop from one in four firms in 2008 to just one in five firms in 2011 (figure 2.2). In fact, the share of firms using the sole proprietorship legal structure has declined significantly in the last 15 years, as nearly half of all firms were classified as such in 1997. Currently, the most common legal structure among all firms, with the exception of sole practitioners, is the S Corporation, with more than one-quarter (28 percent) of firms reporting having been formed under this legal structure. The percentage of firms

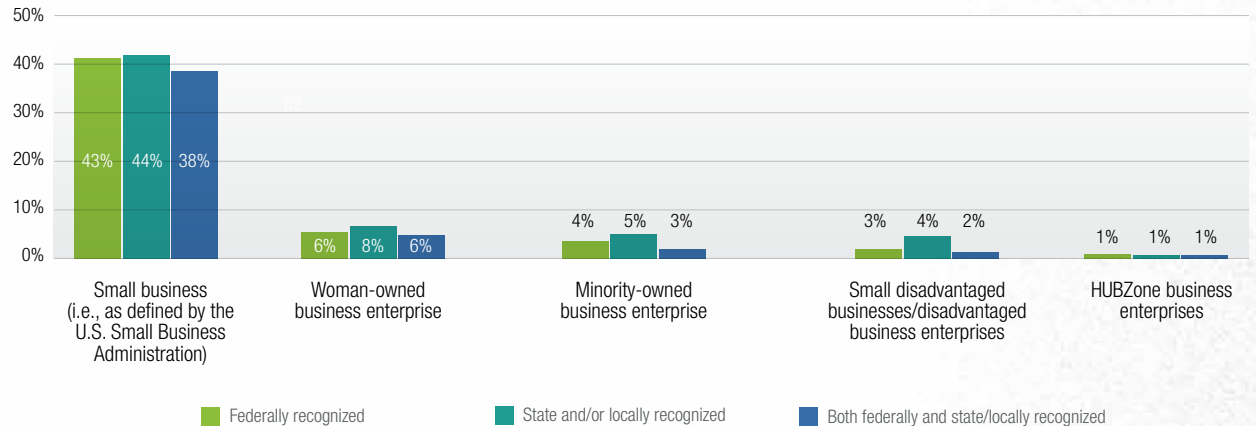
*figure 2.2* | **S CORPORATION IS THE MOST COMMON LEGAL STRUCTURE**

Percent of firms



*figure 2.3* | **NEARLY HALF OF ALL FIRMS ARE RECOGNIZED AS SMALL BUSINESS ENTITIES**

Percent of firms



structured as limited liability companies (LLC), a legal structure now permitted in most states, increased moderately to 22 percent, from 17 percent in 2008. The General Business Corporation (incorporated) is the second choice at firms with 50 or more employees. Among the firms with 10 to 49 employees, the Professional Corporation (PC), Limited Liability Company (LLC), and the General Business Corporation are evenly divided, averaging around 16 percent for each of the business formations.

#### NEARLY HALF OF ALL FIRMS HAVE SMALL BUSINESS STATUS

According to the Small Business Administration (SBA), small businesses represent the majority of all employer firms and employ about half of all private sector employees. They pay more than 44 percent of total U.S. private payrolls and have generated 60 to 80 percent of net new jobs annually over the last decade. Small businesses create more than half of nonfarm private gross domestic product and supplied just over 20 percent of the total value of federal prime contracts in Fiscal Year 2010. More than four in ten architecture firms report that they are recognized as a small business at either the federal or state/local level (figure 2.3). One-half of architecture firms with fewer than 20 employees

*figure 2.4* | **DESPITE THE ECONOMIC DOWNTURN,  
SHARE OF FIRMS OFFERING MOST  
DESIGN-RELATED SPECIALTIES  
HAS INCREASED**

Percent of firms

Design-related discipline/specialty	2011	2008	2005
Architecture	97%	97%	97%
Predesign services	61%	n/a	n/a
Space planning	57%	54%	50%
Interior design	57%	54%	49%
Planning	52%	50%	48%
Consulting	n/a	42%	44%
Sustainable/green design	49%	50%	31%
Historic preservation	30%	30%	29%
Design/build	22%	21%	20%
Construction management	18%	17%	16%
Urban design	17%	16%	15%
Landscape architecture	11%	11%	10%
Engineering	8%	8%	8%
Practice-based research	6%	n/a	n/a

report that they are recognized (both federally and at the state/local level) as a small business, while just over one-quarter of firms with 20 to 49 employees are recognized as such.

The share of firms that are federally recognized women-owned business enterprises (WBE)<sup>2</sup> is 6 percent, and the share that are state/local recognized WBEs is 8 percent, both of which are down significantly from 2008, with declines of 3 and 5 percentage points, respectively. Approximately 4 percent of firms are federally recognized minority-owned businesses enterprises (MBEs),<sup>3</sup> while 3 percent of firms are federally recognized as a Small Disadvantaged Businesses/Disadvantaged Business Enterprises (SDB/DBE). The HUBZone program (Historically Underutilized Business Zones) helps small businesses in urban and rural communities gain preferential access to federal procurement opportunities. Currently, just 1 percent of firms are recognized either at the federal or state/local level in this category.

<sup>2</sup> A WBE is defined as an independently owned and operated business that is at least 51 percent owned and controlled by a woman.

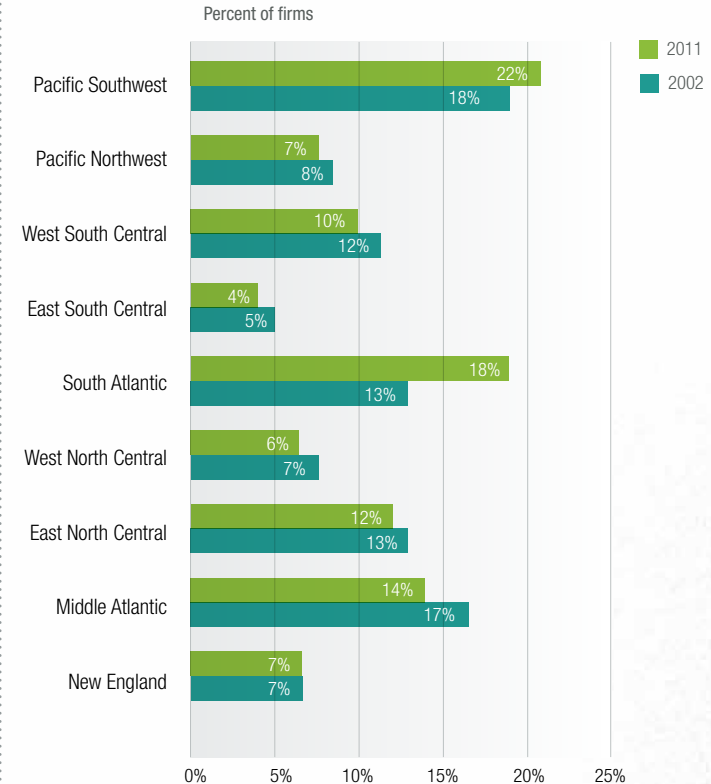
<sup>3</sup> An MBE is defined as a business that is at least 51 percent owned and controlled by minorities.

### MODEST GAINS IN DESIGN-RELATED SPECIALTY SERVICES OFFERED BY FIRMS

Nearly all firms (97 percent) report that they offered architecture services at their firm in 2011, with a significant share also reporting that they offered the design-related disciplines of predesign services (61 percent), space planning (57 percent), interior design (57 percent), and planning (52 percent) (figure 2.4). The share of firms offering the sustainable/green design specialty grew significantly from 2005–2008, but changed little from 2008–2011, with nearly half of firms offering this specialty in 2011. The share of firms offering the interior design, space planning, and planning design specialties grew modestly in the last three years.

Fewer than half of small firms reported that they offer green design services, while more than two-thirds of the midsize firms and four-fifths of large firms do so. Fifty-seven percent of firms with an institutional specialization report offering the green design specialty in contrast to an average of 45 percent of firms with a commercial/industrial or residential specialization.

*figure 2.5* PACIFIC SOUTHWEST AND SOUTH ATLANTIC REGIONS HAVE SEEN THE LARGEST INCREASE IN SHARE OF FIRMS IN THE LAST DECADE



**THE SOUTH ATLANTIC REGION HAS SEEN THE LARGEST INCREASE IN SHARE OF FIRMS IN THE LAST TEN YEARS, WHILE THE MIDDLE ATLANTIC HAS SEEN THE LARGEST DECREASE**

The Pacific Southwest and South Atlantic regions continue to have the greatest share of firms, 22 percent and 18 percent, respectively (figure 2.5). The East South Central region has the smallest share of firms, with just 4 percent, followed by West North Central, with 6 percent. The share of firms in the New England, Pacific Northwest, West South Central, and East North Central regions has remained relatively unchanged in the past 10 years. The largest growth in the last decade was in the Pacific Southwest and South Atlantic regions, with an increase of 4 and 5 percentage points in the share of firms, respectively.

**THE SHARE OF FIRMS WITH MULTIPLE OFFICES DECLINES AT THE LARGEST FIRMS**

Although the majority of architecture firms have one office, just over 10 percent have multiple offices (figure 2.6). Approximately two-thirds of firms with 10 to 49 employees and one-quarter of firms with 50 or more employees have one office, and 43 percent of the firms with 100 or more employees have 5 or more offices. The majority of firms have offices that are located exclusively in the United

*figure 2.6* | LARGE FIRMS WITH MULTIPLE OFFICES REPORT DECLINE IN NUMBER OF OFFICES

Percent of firms

Number of offices	All firms 2011	All firms 2008	2011	2008	2011	2008
			50-99 employees	50-99 employees	100+ employees	100+ employees
5 +	2%	3%	20%	18%	43%	60%
4	1%	1%	16%	9%	9%	7%
3	2%	2%	13%	14%	20%	10%
2	7%	7%	21%	26%	20%	5%
1	88%	87%	30%	33%	9%	18%

States, with just 2 percent reporting that they have offices overseas.

The change in the number of offices between 2008 and 2011 was most dramatic at the largest firms. The share of firms with 100 or more employees that have multiple offices and had 5 or more offices in 2008 has declined significantly, with the majority reporting that they now maintain just 2 to 3 offices. On the other hand, more than one-third of firms with 50 to 99 employees and multiple offices reported having 4 or more offices in 2011, versus just over one-quarter who reported the same in 2008. ■





The economic downturn that began near the end of 2007 had tremendous negative ramifications for the architectural industry. As a result, the average number of payroll employees at a typical firm declined nearly 20 percent from 2008, with half of those lost from the architecture staff.

- Nearly 20 percent of firms reported a net loss of full-time staff in 2011.

- The share of female architecture staff at architecture firms declined modestly in the last three years.

- The share of firms with LEED AP-certified staff nearly doubled, from 35 percent in 2008 to 65 percent in 2011.

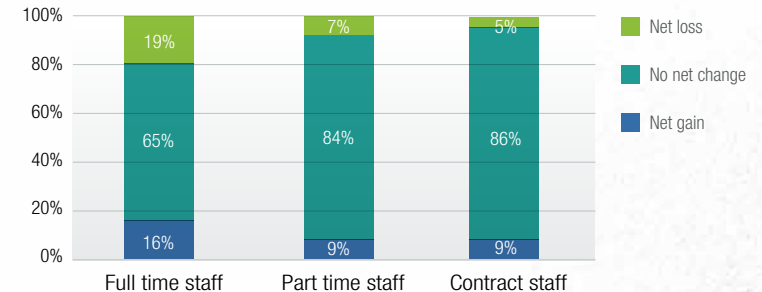
#### MOST FIRMS REPORT NO NET CHANGE IN STAFF IN THE LAST YEAR

As the economy attempts to recover after the most recent downturn, the majority of architecture firms report there has been no net change in the number of staff at their firms from January 1, 2011, to January 1, 2012. On average, 20 percent of firms reported a net loss of full-time employees, while 16 percent indicated that they had seen a net gain (figure 3.1). The larger the firm, the greater the variation in the share of staff gained and lost. Three-quarters of firms with fewer than 10 employees reported no change to their full-time staff, while only 10 percent reported gains. For firms with 10 to 49 employees, the share that reported gains (37 percent) prevailed over those who reported a loss of full-time staff (32 percent). Half of the large firms reported net gains, but at the same time, slightly over one-third of firms reported a net loss of full-time staff.

figure 3.1

#### SIXTEEN PERCENT OF FIRMS REPORT NET GAIN IN FULL TIME STAFF DURING 2011

2011 net change in staffing reported by firm, percent of firms

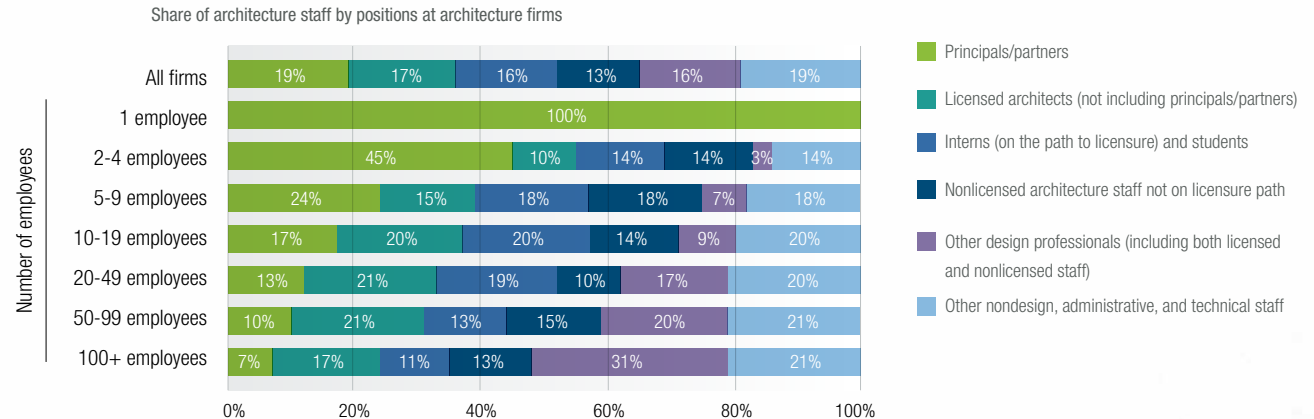


### NEARLY 40 PERCENT OF STAFF AT FIRMS ARE LICENSED ARCHITECTS

The economic downturn has had a major impact on the size of the architecture industry. On average, the number of staff at architecture firms has declined from about ten in 2008 to eight in 2011. Of those two employees lost, on average, one was from the nondesign staff and one was from the architecture staff. The loss from the design staff was primarily from nonlicensed architecture personnel.

Overall, 17 percent of employees at architecture firms are licensed architects, with another 16 percent of staff composed of interns on the path to licensure (figure 3.2). An additional 13 percent of staff are nonlicensed architecture staff who are not on the path to licensure. In general, the share of nonarchitecture staff, which might include engineers, interior designers, and landscape architects, increases with firm size. Finally, approximately 20 percent of workers at firms are nondesign staff, which includes such professionals as accountants, marketers, information technology staff, and human resources managers.

figure 3.2 SHARE OF NONARCHITECTURE STAFF TYPICALLY INCREASES WITH FIRM SIZE



### THE SHARE OF FEMALE AND MINORITY ARCHITECTURE STAFF DECLINES MODESTLY

Women now compose just over one-third (35 percent) of all staff at architecture firms, a slight decline from 2008. Overall, 25 percent of architecture staff are female, versus 27 percent three years ago (figure 3.3). The decrease in the share of female architecture staff was primarily in the nonlicensed architecture staff category, which declined by a significant 6 percentage points from 2008.

The share of architecture staff that are considered part of a racial/ethnic minority was unchanged from 2008. The share of minority principals/partners increased modestly by 1 percentage point, while the share of minority nonlicensed architecture staff declined 2 percentage points from 2008. Despite the small gain in the minority leaders at firms, the share of minority licensed architect staff dropped by 4 percentage points during this economic downturn.

On average, almost one-third of all staff at firms is under the age of 35. This is a modest decline from 2008, when 35 percent of staff was in this age

group. On the opposite end of the spectrum, the share of staff who are 55 or older has increased by 3 percentage points from three years ago. This is typical during an economic downturn, when the younger or least experienced staff often are the first to be let go. Furthermore, the general economic trend has been that workers are staying longer at their jobs, past the historical retirement age. Youth employment in general has felt a record impact during this economic decline, with emerging architectural professionals having been particularly hard hit during the construction downturn.

### LEED AP-CERTIFIED STAFF NEARLY DOUBLES AT FIRMS

Two-thirds of architecture firms now have at least one LEED<sup>4</sup>-accredited professional (LEED AP) on staff versus just one-third in 2008. Ninety percent of firms with 10 or more employees have at least one LEED AP-certified staff member, and more than half of small firms have at least one LEED AP-certified staff member, compared to just under 25 percent in 2008. Nearly two-thirds of large firms have more than 20 staff with LEED AP certifications. On average, firms with 20 to 49 employees have 8 LEED APs on staff and firms with 10 to 19 employees typically have 3 LEED-certified staff (figure 3.4).

### MOST FIRMS USE ENGINEERING CONSULTANTS

Since the majority of architecture firms are small or mid-size businesses, they rely heavily on consultants and part-time staff to provide flexibility. In fact, 85 percent of firms regularly hired engineers as consultants in the last three years, making them

<sup>4</sup> Leadership in Energy and Environmental Design (LEED), developed by the U.S. Green Building Council (USGBC), is an internationally recognized green building certification system, providing third-party verification that a building or community was designed and built using strategies aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, CO<sub>2</sub> emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

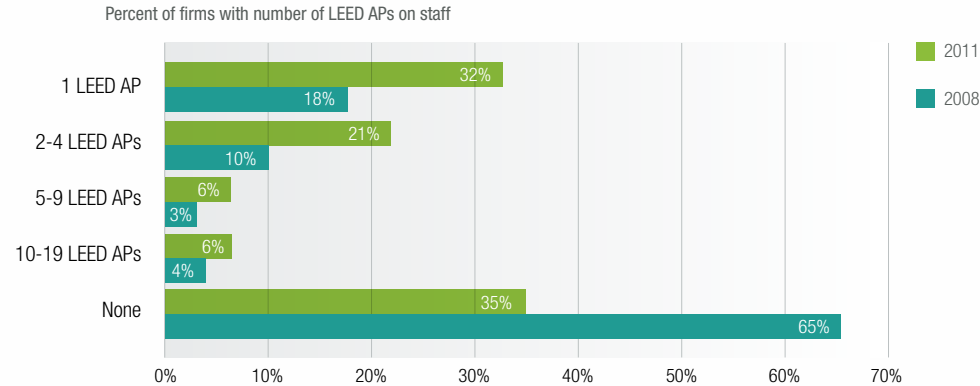
figure 3.3 | SHARE OF FEMALE AND MINORITY DESIGN STAFF AT ARCHITECTURE FIRMS DECLINES MODESTLY



the most hired group of professionals by far (figure 3.5). However, although firms with 100 or more employees are more likely to have engineers on staff, 4 in 5 still use engineering consultants to supplement staff. Approximately three-quarters of firms with 10 to 99 employees use landscape architect consultants, compared to slightly over one-third of firms with 1 to 4 employees. The share of firms that regularly use interior design consultants has increased, on average, 3 percentage points since 2005 and nearly 10 percentage points since 2002.

The types of consultants that firms use also tends to vary by firm specialization. M/E/P engineers are hired as consultants more frequently at firms with commercial/industrial and institutional specializations, whereas residential firms are more likely to use C/S engineers as consultants. Landscape architects are also used by many firms that have an institutional specialization, which may include projects like public buildings, museums, and recreational structures. In general, it is more common for firms with a commercial/industrial or institutional specialization to hire code consultants and other specialty consultants, as there are more design features to incorporate into their projects, such as security and communication networks. ■

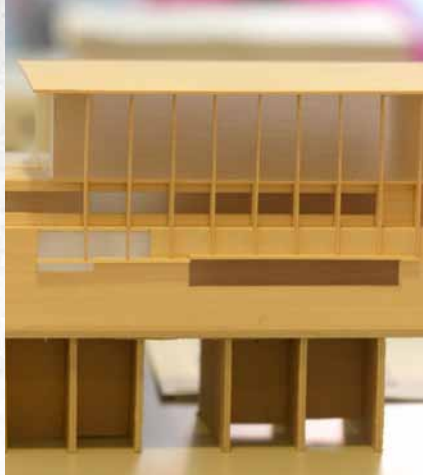
*figure 3.4* | NUMBER OF LEED APs ON STAFF NEARLY DOUBLED IN THE LAST THREE YEARS



*figure 3.5* | LARGEST SHARE OF FIRMS USE M/E/P AND C/S ENGINEERS AS OUTSIDE CONSULTANTS

Use of outside consultant in the last three years, percent of firms by specialization

	All firms	Residential	Commercial/ Industrial	Institutional
M/E/P engineers	85%	74%	93%	92%
C/S engineers	78%	81%	76%	78%
Landscape architects	56%	50%	52%	65%
Interior designers	31%	35%	33%	29%
Sustainability consultants	20%	17%	17%	24%
Spec writers	17%	13%	19%	20%
Planners	6%	4%	4%	9%
Other specialty consultants (e.g., code consultants)	27%	18%	28%	35%



- Gross billings at architecture firms fell to a total of \$26.0 billion in 2011, with a decline of more than 50 percent in pass-throughs from 2008.

- More than two-thirds of architecture firm billings are from projects for repeat clients, an increase of 10 percentage points from 2005.

- The share of architecture firms that have obtained Building Information Modeling (BIM) software has reached a relative plateau of 38 percent, but the share of those firms with BIM software that are actually using the BIM software for billable work has grown to 76 percent.

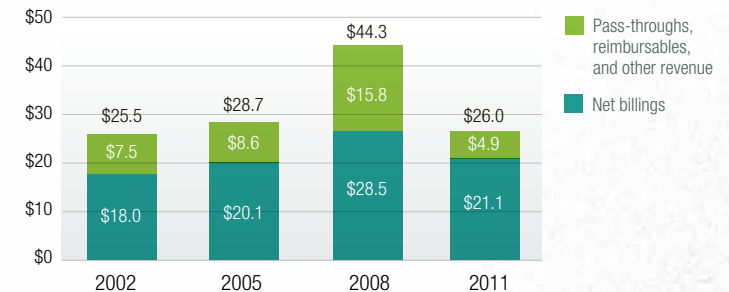
Architecture firms reported total annual gross billings of \$26.0 billion in 2011, a decline of more than 40 percent from 2008 billings. (figure 4.1) This returns firm billings to a level last seen a decade ago, reflecting the depth and breadth of the economic downturn. Large firms contribute the largest share of billings, with nearly half of all gross billings (43 percent) having been generated by firms with 50 or more employees, compared to just 20 percent of gross billings from firms with fewer than 10 employees.

#### PASS-THROUGHS, OTHER REIMBURSABLE EXPENSES DECLINE SHARPLY AT ARCHITECTURE FIRMS

The decline in gross billings over the last three years was led primarily by a decline in pass-throughs, reimbursables, and other revenue. While net billings declined by 34 percent from 2008 to 2011, pass-throughs declined by more than 50 percent. Despite the protracted economic downturn, it appears that architecture firms chose to offer a wider variety of services in-house, reducing the need to give work to subcontractors and consultants. In fact, net billings averaged 72 percent of gross billings in 2011, compared to 64 percent in 2008, an increase of nearly 10 percentage points (figure 4.2). In addition, small firms tended to report a larger share of their firm's gross billings from net billings than did large firms. Mid-size and large firms reported that nearly 30 percent of their 2011 gross billings were

figure 4.1 | ARCHITECTURE FIRM GROSS BILLINGS AVERAGED \$26 BILLION IN 2011

Billings at AIA member-owned firms, \$ billions





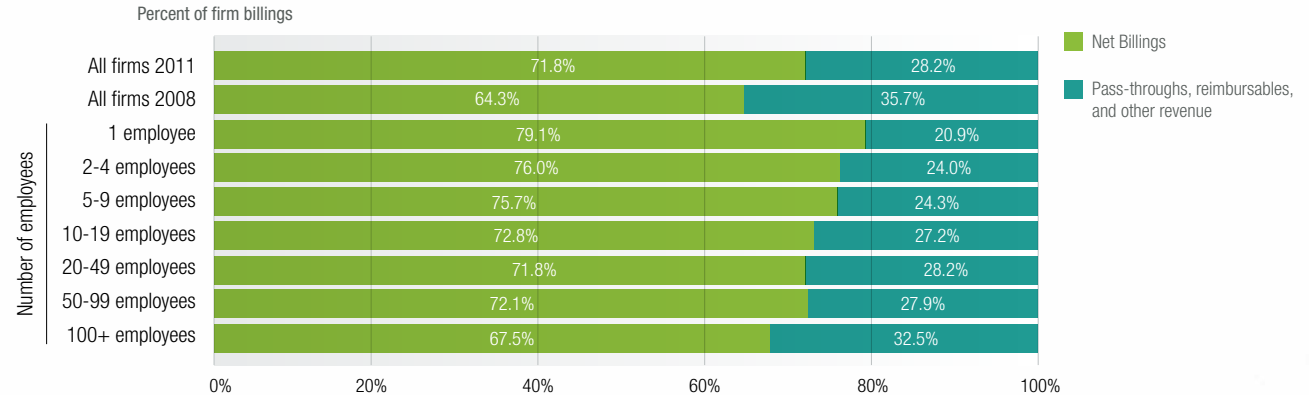
from pass-throughs and other related expenses, compared to an average of 23 percent for small firms with four or fewer employees.

The impact of declining firm billings was also noticeable in the average net billings per employee in 2011, which, at an average of \$86,000, was almost \$10,000 less than was reported in 2008 (figure 4.3). Small firms suffered some of the most significant declines in billings per employee, but large firms with 100 or more employees also reported significant declines in billings, \$20,000 per employee, on average. Only firms with 5 to 9 employees showed a modicum of growth in the last three years, with the average net billings per employee increasing by \$3,000.

**FIRM PROFITABILITY REMAINS RELATIVELY HIGH**

Despite the economic downturn, architecture firms have been able to remain relatively profitable, with firms reporting that their 2011 profit was an average of 10 percent of their net billings (figure 4.4). Although this is admittedly a significant decline from 2005, when the profitability of the average firm stood at nearly 14 percent of net billings, it still indicates that profitability is reasonably high. Firms with a commercial/industrial specialization (defined as having 50 percent or more of their 2011 firm billings coming from projects in that sector) reported the highest level of profitability in 2011, while firms

*figure 4.2* NET BILLINGS ACCOUNT FOR MORE THAN 70 PERCENT OF GROSS BILLINGS



*figure 4.3* NET BILLINGS PER EMPLOYEE AVERAGED \$86,000 IN 2011, DOWN NEARLY \$10,000 FROM 2008

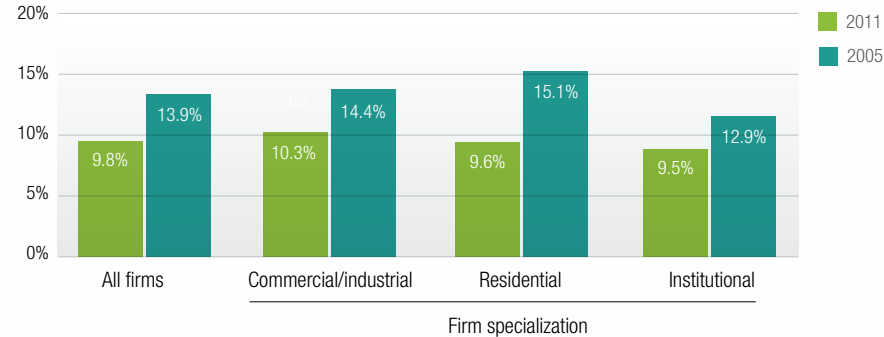


with a residential specialization, which had the highest profitability in 2005 at the peak of the housing boom, reported that their profitability has declined significantly with the collapse of that market.

Projects are billed in a variety of ways at architecture firms, with client negotiations typically determining the method used. The stipulated sum (fixed fee) billing method has accounted for the largest share of firm billings in recent years, but in 2011 it grew even further, accounting for more than one-third of all firm billings (figure 4.5). Since the fee is fixed, this method requires the architecture firm to assume the bulk of the risk. As competition for projects heated up in the depressed economy, firms appear to have been more willing to take risks to land projects and have chosen to go with the billing method that is riskier to them more often than they have in the past. An additional 21 percent of firm billings are billed using the professional fee plus reimbursable expenses method, which is particularly common at small firms, but less so at large firms. Sole practitioners also report that more than a quarter of their firm billings are billed using the hourly rate (no maximum) method, compared to less than 10 percent of billings at firms with 10 or more employees.

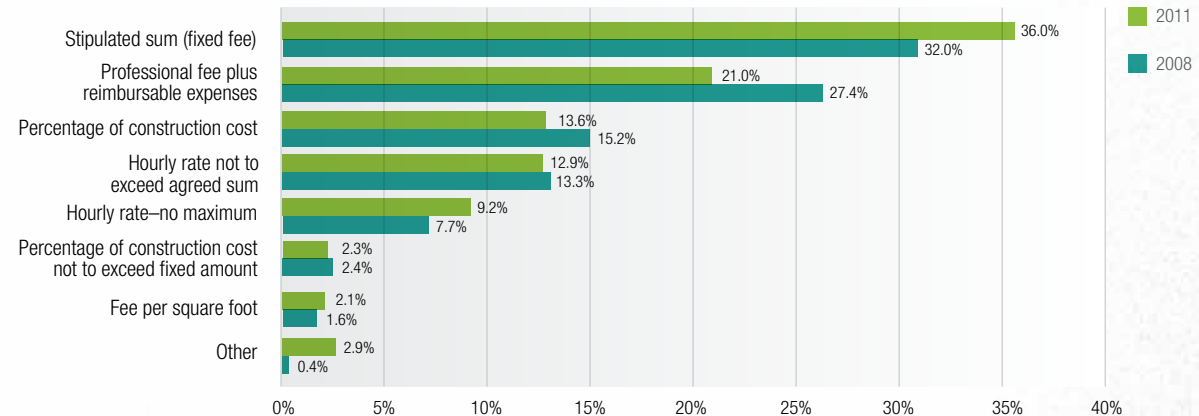
*figure 4.4* FIRM PROFITABILITY REMAINS RELATIVELY HIGH DESPITE DOWNTURN

Average firm profit as percent of net billings



*figure 4.5* MORE THAN ONE-THIRD OF FIRM BILLINGS ARE FROM PROJECTS BILLED USING STIPULATED SUM (FIXED FEE) METHOD

Percent of firm billings

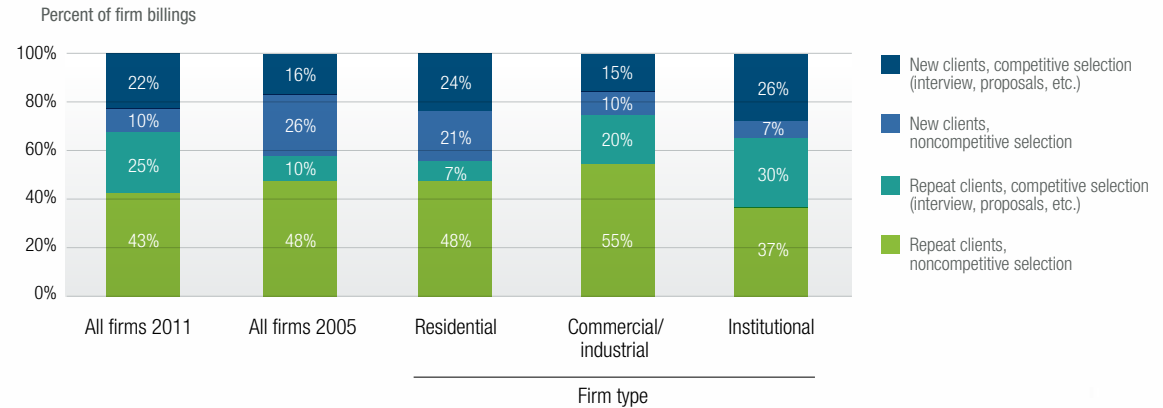


Architecture firms report that nearly two-thirds of their firm billings are from basic design services (an average of 64 percent of billings for all firms). Approximately 10 percent of billings are from planning and predesign services, 9 percent from nonarchitectural design services, and 8 percent from expanded design services. Small firms report that fewer of their billings are from nonarchitectural design services and slightly more are from basic design services than for larger firms. But for the most part, the distribution of firm billings by service type has been little affected by the downturn and is relatively the same as it was in 2008.

#### SHARE OF FIRM BILLINGS FROM REPEAT CLIENTS INCREASES

On average, more than two-thirds of 2011 architecture firm billings, 68 percent, were from projects for repeat clients, an increase of 10 percentage points from 2005 (figure 4.6). Although firms have reported that during the downturn clients have been soliciting bids from more firms than was typical in the past, clients are still more likely to work with a firm with which they already have a relationship. Firms with a commercial/industrial specialization reported the largest share of their firm billings from repeat clients (75 percent), while firms with a residential specialization indicated that nearly half of their billings (45 percent) were from new clients.

figure 4.6 REPEAT CLIENTS ACCOUNT FOR LARGER SHARE OF FIRM BILLINGS THAN IN PAST



Clients from state or local government entities remain the most common client type for architecture firms of all sizes, accounting for one-quarter of firm billings in 2011, while they accounted for nearly one-third of the billings at mid-size firms (figure 4.7). Small firms reported that nearly half of their billings were from individuals, but overall individuals accounted for just 12 percent of billings at all firms. Business, commercial, and industrial companies are also popular clients, accounting for 20 percent of firm billings, while nonprofit institutions accounted for 16 percent of all firm billings and nearly one-third of billings at firms with 100 or more employees. Regardless of firm size, very little work was done for the federal government in 2011.

Pro bono work is relatively common at many firms, with six in ten having provided pro bono work in 2011. Large firms were more likely to provide pro bono work than small firms, with 67 percent of firms with 50 or more employees providing the service in contrast to 55 percent of firms with four or fewer employees. Firms with an institutional specialization were also much more likely to report having offered pro bono work than those with residential or commercial/industrial specializations.

*figure 4.7* | MORE THAN ONE QUARTER OF FIRM BILLINGS ARE FROM STATE/LOCAL GOVERNMENT CLIENTS

Client type	Percent of firm billings							
	All firms	Number of employees						
		1	2-4	5-9	10-19	20-49	50-99	100+
State or local government (including public schools)	25.4%	8.6%	13.7%	25.6%	29.6%	32.4%	30.7%	17.6%
Other business, commercial, or industrial companies	19.9%	11.7%	16.7%	18.6%	13.7%	22.1%	22.8%	21.8%
Nonprofit institutions (e.g., private schools, museums, churches)	15.8%	10.2%	11.4%	9.6%	11.9%	10.8%	11.6%	29.3%
Developers, construction companies	14.4%	14.4%	14.0%	15.3%	12.4%	16.7%	14.1%	13.3%
Private individuals	12.1%	44.2%	37.1%	22.7%	18.5%	7.3%	4.9%	3.6%
Federal government	7.0%	0.4%	1.1%	4.0%	7.9%	6.6%	9.1%	8.7%
Other architects, engineers, design professionals	4.3%	8.2%	5.1%	3.1%	3.9%	3.5%	3.5%	5.7%
Other	1.2%	2.2%	0.8%	1.1%	2.1%	0.5%	3.3%	0.0%

### NEARLY FOUR IN TEN FIRMS HAVE OBTAINED BIM SOFTWARE

While the share of architecture firms that have obtained BIM software nearly doubled from 2005 to 2008, it has reached a relative plateau and grown by just 4 percentage points in the last three years (figure 4.8). Nearly four in ten firms have obtained the software, but while the majority of large firms have done so, many small firms are still holding out. In fact, more than half of sole practitioners report that they have not acquired BIM software and do not plan to do so in the foreseeable future. However, of the firms that have obtained BIM software, the share that is actually using the software for billable work has grown. More than three-quarters of firms that have obtained BIM software are now using it for billable work, compared to 69 percent in 2008.

Of the firms that are using BIM software for billable work, the average estimate is that 67 percent of the office's work is conducted using the BIM software, with small firms reporting a larger share of their work done using BIM than large firms. The firms using BIM software for billable work indicate that they are most likely to use it for design visualization services (91 percent of firms), coordinated construction documents (74 percent), and sharing models with consultants (55 percent) (figure 4.9). Large firms also indicate that resolving conflicts with other disciplines (clash detection) and sharing models with constructors/trade contractors are popular uses of BIM software in their offices. ■

figure 4.8 | THREE-QUARTERS OF FIRMS THAT HAVE OBTAINED BIM SOFTWARE ARE USING IT FOR BILLABLE WORK

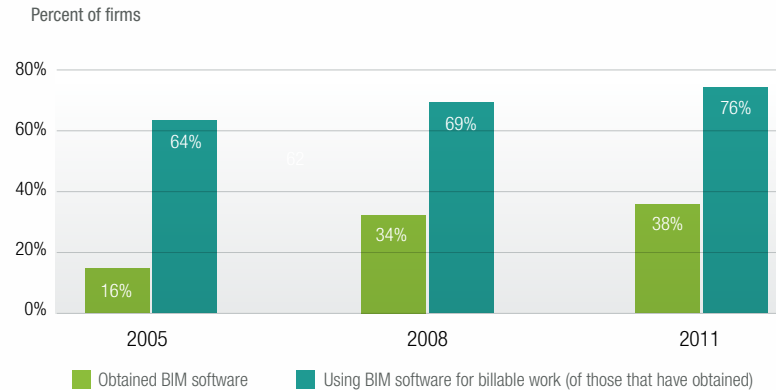
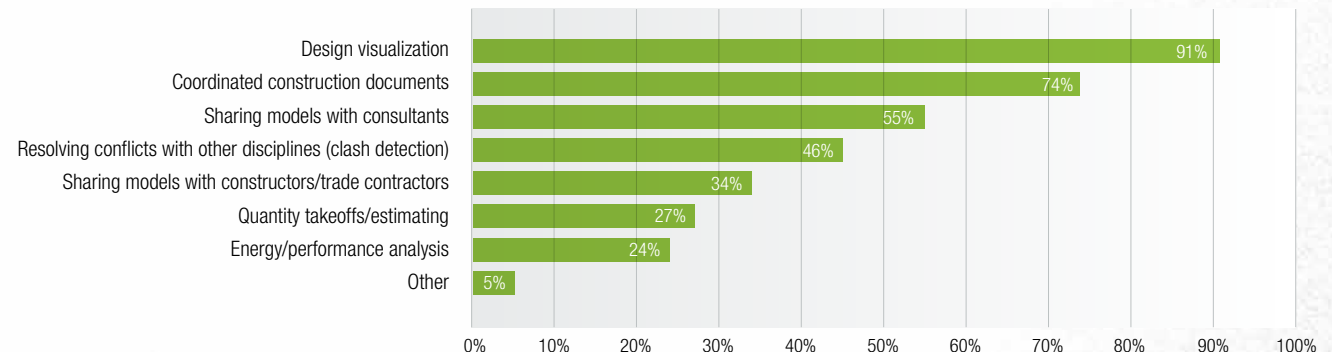
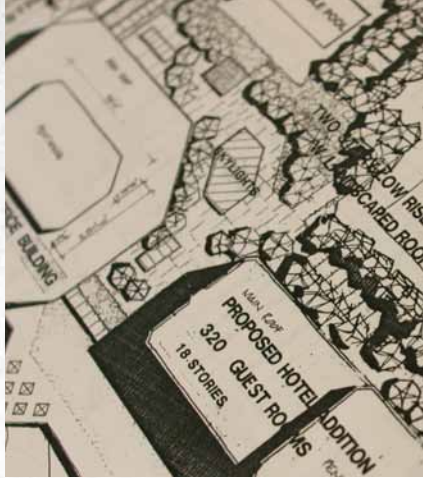


figure 4.9 | BIM SOFTWARE MOST COMMONLY USED FOR DESIGN VISUALIZATION, COORDINATED CONSTRUCTION DOCUMENTS

Services for which BIM is being used, percent of firms using BIM for billable work (multiple responses permitted)







- The share of firm billings from renovations, rehabilitations, additions, and other construction projects increased substantially in the last three years, although new construction projects still account for the largest share of billings overall.

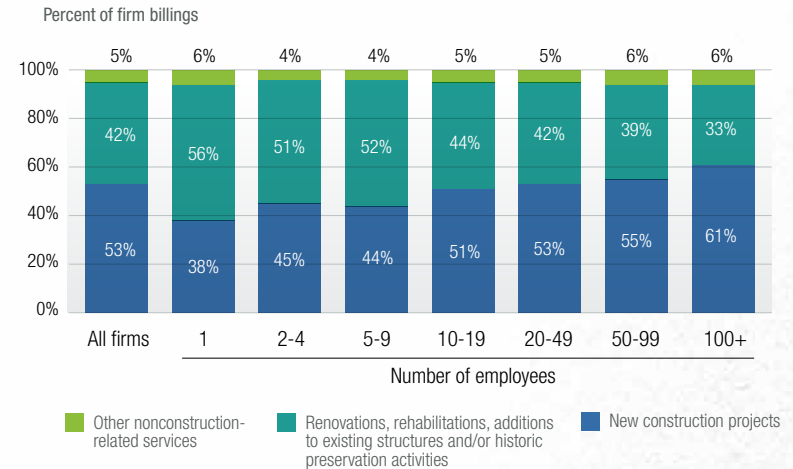
- Institutional and residential projects account for a larger share of firm billings in 2011 than in 2008, while the share of billings from commercial/industrial projects declined.

- More than twice as many firms began single-family residential projects in 2011 than began multifamily residential projects.

With the economic downturn, the share of architecture firm billings from new construction projects declined dramatically from 2008 to 2011. Three years ago new construction projects accounted for nearly two-thirds of firm billings, but by 2011 that share had fallen by 12 percentage points to account for just 53 percent of billings. (figure 5.1)

Although new projects still compose the overall majority of firm billings, renovations, rehabilitations, additions, and other construction projects have markedly increased their shares, particularly at mid-size and large firms. At firms with fewer than 10 employees, the majority of firm billings continue to be from renovations, rehabilitations, additions, and historic preservation, as in the past. Issues that are likely related to the economic downturn have led more clients to request modifications to existing buildings instead of entirely new structures, which had been more common in the past.

figure 5.1 | NEW CONSTRUCTION PROJECTS ACCOUNT FOR JUST OVER HALF OF FIRM BILLINGS



### NEARLY 60 PERCENT OF FIRM BILLINGS ARE FROM INSTITUTIONAL PROJECTS

When considering the distribution of architecture firm billings by project type, institutional projects continue to account for the largest share of billings at all firms (except for the smallest), accounting for an average of 58.2 percent of firm billings (figure 5.2). One key change from 2008 was the decline in the share of commercial/industrial projects, which fell by more than 4 percentage points in that three-year period. The shares of all types of projects in this sector declined, with the largest loss coming from office projects, where the share of billings fell by more than 2 percentage points. A fairly substantial decline of nearly 4 percentage points can also be found in the share of projects reported as “other construction,” which respondents reported included such projects as auto dealerships, mixed use projects, and parking lots or garages.

On the other hand, the share of firm billings from both the institutional and residential sectors increased from 2008, with institutional billings climbing by nearly 5 percentage points. The largest gains in this sector came from education projects (both K-12 and college/university projects), which offset minimal declines in the share of billings from health care, justice, religious, recreational, and transportation projects. The increase in the share of billings from residential projects was primarily led by a gain of nearly 2 percentage points in multifamily

figure 5.2 | NEARLY 60 PERCENT OF FIRM BILLINGS ARE FROM INSTITUTIONAL PROJECTS

	2011	2008
Single-family residential	6.2%	5.5%
Multifamily residential	7.5%	5.8%
<b>Residential total</b>	<b>13.7%</b>	<b>11.3%</b>
Office	9.2%	11.3%
Retail, food services, warehouses, etc.	7.6%	8.4%
Hospitality	3.7%	4.8%
Industrial	3.3%	3.6%
<b>Commercial/industrial total</b>	<b>23.8%</b>	<b>28.1%</b>
Education (K–12)	12.4%	9.0%
Education (college/university)	12.4%	9.0%
Health care	17.2%	18.2%
Justice (e.g., corrections, courthouses)	1.6%	2.3%
Other government/civic (e.g., post office, federal office buildings)	6.4%	5.9%
Religious	2.0%	2.2%
Cultural (e.g., museums)	2.0%	1.7%
Recreational (e.g., sports centers, theme parks)	2.2%	2.3%
Transportation (e.g., airports, rail, bus, mass transit)	2.2%	2.9%
<b>Institutional total</b>	<b>58.4%</b>	<b>53.5%</b>
<b>Other construction projects</b>	<b>2.3%</b>	<b>6.0%</b>
<b>Nonconstruction projects</b>	<b>1.8%</b>	<b>1.1%</b>

projects, although there also was a minimal increase in billings from single-family projects. Although the economic downturn had a significant effect on residential projects in its earlier stages, demand was once again beginning to increase in 2011.

### MORE THAN TWO-THIRDS OF RESIDENTIAL BILLINGS ARE FROM THE CONSTRUCTION OF NEW HOUSING UNITS

Of those firms that did report having billings from residential projects in 2011, more than two-thirds of those billings (67 percent) were from new housing units (figure 5.3). An average of 44 percent of total residential billings were reported to be from new multifamily housing units, although the share ranged from less than 10 percent for sole practitioners all the way up to 80 percent for the largest firms. Only small firms reported that a larger share of their residential billings came from new single-family units than from new multifamily units. And sole practitioners were the only group to report that more than half of their residential firm billings were from additions or renovations, which accounted for less than one-quarter of residential billings at firms with 10 or more employees.

Nearly half of all firms (45 percent) indicated that they began design work on new single-family or multifamily construction projects in 2011. Small firms were slightly more likely to have started new

### figure 5.3 MAJORITY OF RESIDENTIAL BILLINGS ARE FROM CONSTRUCTION OF NEW HOUSING UNITS

Percent of residential billings, of firms with residential billings in 2011

Residential project type	All firms	Number of employees						
		1	2-4	5-9	10-19	20-49	50-99	100+
Construction of new multifamily housing units	44%	9%	15%	27%	58%	60%	62%	80%
Construction of new single-family housing units	23%	35%	39%	30%	18%	13%	13%	6%
Additions to existing housing units	9%	24%	15%	13%	5%	5%	4%	4%
Renovations/remodels/alterations of existing housing units	24%	33%	31%	31%	18%	22%	21%	10%

residential projects than mid-size and large firms, but the overall share varied little by firm size. Of the firms that did start new residential projects in 2011, 67 percent started new single-family projects, while 29 percent reported starting new multifamily projects.

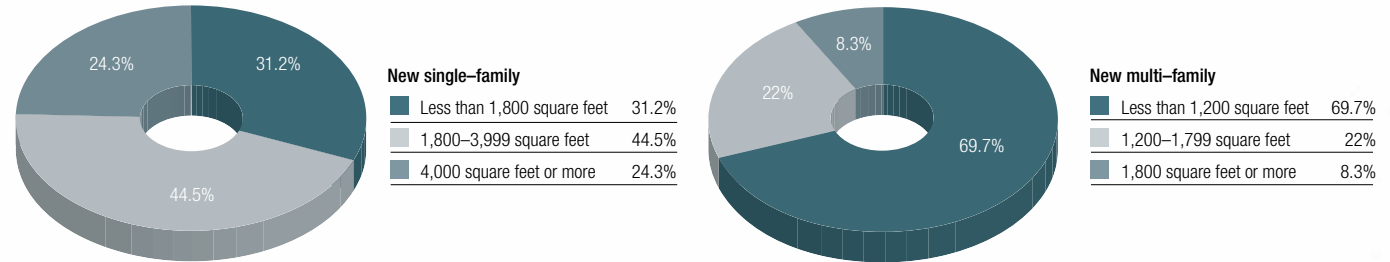
The largest share of new single-family housing units started in 2011, 44.5 percent, fell into the 1,800- to 3,999-square-foot size range (figure 5.4). Less than one-quarter of new housing units started last year were houses with 4,000 or more square feet. The majority of the new multifamily housing units started in 2011, nearly 7 in 10, were less than 1,200 square feet. Fewer than 10 percent were units that were 1,800 square feet or larger.

**MOST ARCHITECTURE FIRMS HAVE A RESIDENTIAL OR INSTITUTIONAL SPECIALIZATION**

The majority of architecture firms can be classified as having had either a residential or an institutional specialization in 2011, defined as having 50 percent or more of 2011 firm billings from that sector (figure 5.5). Small firms were more likely to have a residential specialization, while large firms were more likely to have an institutional specialization. The share of firms with a commercial/industrial specialization hovered around just two in ten firms, regardless of firm size. The remaining firms are classified as mixed, meaning that they do not have

*figure 5.4* | MOST HOUSING UNITS STARTED IN 2011 WERE MODESTLY SIZED

Percent of housing units of each size by project type, of housing units begun in 2011



*figure 5.5* | MAJORITY OF FIRMS HAVE A RESIDENTIAL OR INSTITUTIONAL SPECIALIZATION

Percent of firms with 50 percent or more of 2011 firm billings in given sector

Firm specialization	All firms 2011	All firms 2008	Number of employees						
			1	2-4	5-9	10-19	20-49	50-99	100+
Residential	33.5%	35.0%	47.2%	39.0%	26.2%	13.6%	8.8%	5.0%	3.0%
Commercial/industrial	21.7%	21.0%	20.6%	23.6%	20.5%	19.3%	20.3%	23.4%	26.4%
Institutional	32.9%	27.0%	18.3%	24.2%	42.1%	59.4%	64.8%	63.2%	64.5%
Mixed	11.9%	18.0%	13.9%	13.2%	11.2%	7.6%	6.1%	8.3%	6.1%

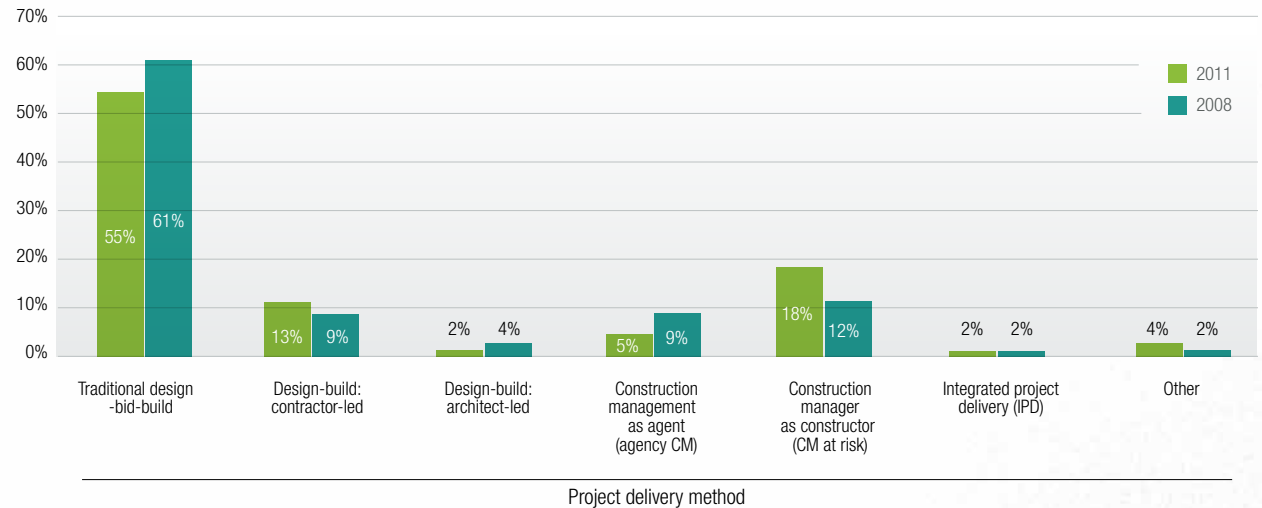
50 percent or more of their firm billings from any one category. The share of firms with an institutional specialization has increased by nearly 6 percentage points from 2008, while the share of mixed firms has declined by nearly the same amount. Firms with more diversified practices in the past appear to have honed their specialization more, leading to fewer of the more generalist firms with billings from a variety of project types.

There has been little change overall from 2008 in the distribution of the different project delivery methods used by architecture firms. The traditional design-bid-build method continued to account for the largest share of construction contract value, 55 percent, although that was down by 6 percentage points from 2008 (figure 5.6). An increase in contractor-led design-build made up for the majority of that decline, as it grew by 4 percentage points to account for 13 percent of project value in 2011. The construction manager as constructor (CM at risk) method also rose, and it now accounts for nearly 20 percent of contract value. Integrated project delivery (IPD) continues to account for a very small share of project value, just 2 percent, which is relatively consistent at firms of all sizes, in all specializations, and in all regions of the country. ■

figure 5.6

## CONTRACTOR-LED DESIGN-BUILD, CM AT RISK INCREASE IN POPULARITY

Percent construction contract value for projects begun in 2011







More than three-quarters of all architecture firms reported that they carried at least some form of professional liability insurance in 2011, down substantially from the 96 percent who reported that they carried some form of professional liability insurance in 2005. (figure 6.1)

- Seventy-eight percent of architecture firms carried at least some form of professional liability insurance in 2011.
- The purchase of project-based professional liability insurance is relatively uncommon, but for those firms that did purchase it in 2011, the primary reason was to satisfy the request of the client/owner.
- More than one-third of large firms reported having purchased special supplemental insurance coverage for international work in 2011.

The use of practice-based professional liability insurance was far more widespread than the use of project-based professional liability insurance, which was carried by an average of just 11 percent of architecture firms in 2011. Large firms were more likely to have carried project-based insurance, with more than one-third of firms with 100 or more employees having carried it, in comparison to less than 10 percent of firms with 4 or fewer employees. However, there is still a significant number of firms that reported that they did not carry either type of liability insurance in 2011, which may be at least partially due to the economic downturn. If firms have a period without work, they may not see the need to carry liability insurance during that time.

#### LARGE FIRMS ARE MOST LIKELY TO CARRY BOTH PRACTICE- AND PROJECT-BASED PROFESSIONAL LIABILITY INSURANCE

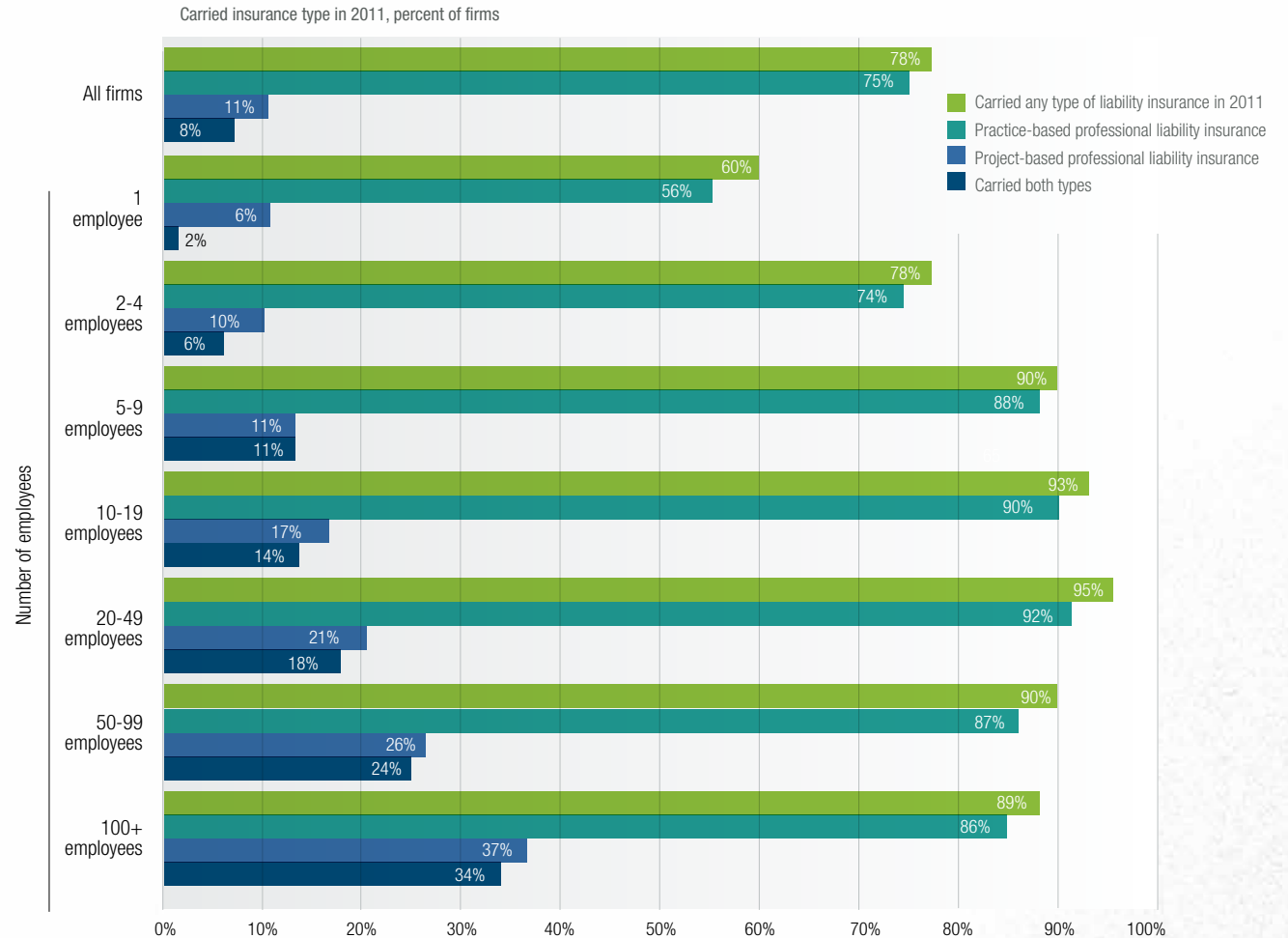
Although the majority of firms reported having carried practice-based professional liability insurance in 2011, large firms were still more likely to have carried it than small firms, despite the fact that more than half of sole practitioners carried it. Few firms felt the need to carry both practice-based and project-based liability insurance (just 8 percent on average), but again the share of firms carrying both increased with firm size. More than one-quarter of firms with 50 or more employees indicated that they carried both types of insurance in 2011.

In general, project-based professional liability insurance was not used very often in 2011, with just over one-third of firms (35%) that carried project-based insurance indicating that they had at least a few projects covered by this type of insurance (figure 6.2). An average of one-quarter of small and mid-size firms reported that the majority of their projects were covered by project-based insurance, while fewer than 20 percent of large firms indicated the same. In fact, although fewer than one-third of firms with 100 or more employees indicated that none of their projects have project-based coverage, nearly half of these same firms reported that only a few of their projects were covered in 2011. So while more large firms have project-based professional liability insurance coverage for at least some of their projects, they actually use it for a smaller share of their projects.

### MOST FIRMS CARRY PROJECT-BASED LIABILITY INSURANCE AT THE CLIENT'S REQUEST

Among those firms that did carry project-based professional liability insurance in 2011, the most commonly cited reason cited for purchasing this type of insurance was that the owner/client requested the coverage in the contract requirements for the project (figure 6.3). This response was selected by more than three-quarters of these firms. One-quarter of firms also cited an internal risk management decision as a reason for the coverage, which was selected much more frequently by small firms than by large firms. On the other hand, the ability to bill directly to an individual project was reported as a reason for carrying project-based insurance more often by larger firms.

figure 6.1 LARGE FIRMS ARE MOST LIKELY TO CARRY BOTH PRACTICE-AND PROJECT-BASED PROFESSIONAL LIABILITY INSURANCE



**FEW FIRMS PURCHASE SPECIAL LIABILITY INSURANCE COVERAGE FOR INTERNATIONAL PROJECTS**

Another professional liability insurance option available to firms is additional coverage for international work. Fourteen percent of firms overall reported having carried this special insurance in 2011, with large firms much more likely to have obtained it than small firms. In fact, more than one-third of firms with 50 or more employees reported having carried special professional liability or business insurance for international work in 2011, most likely because they have more international work and need to ensure that those projects are fully covered against potential claims. ■

figure 6.2

**JUST 35 PERCENT OF FIRMS REPORT THAT AT LEAST SOME OF THEIR PROJECTS ARE COVERED BY PROJECT-BASED PROFESSIONAL LIABILITY INSURANCE**

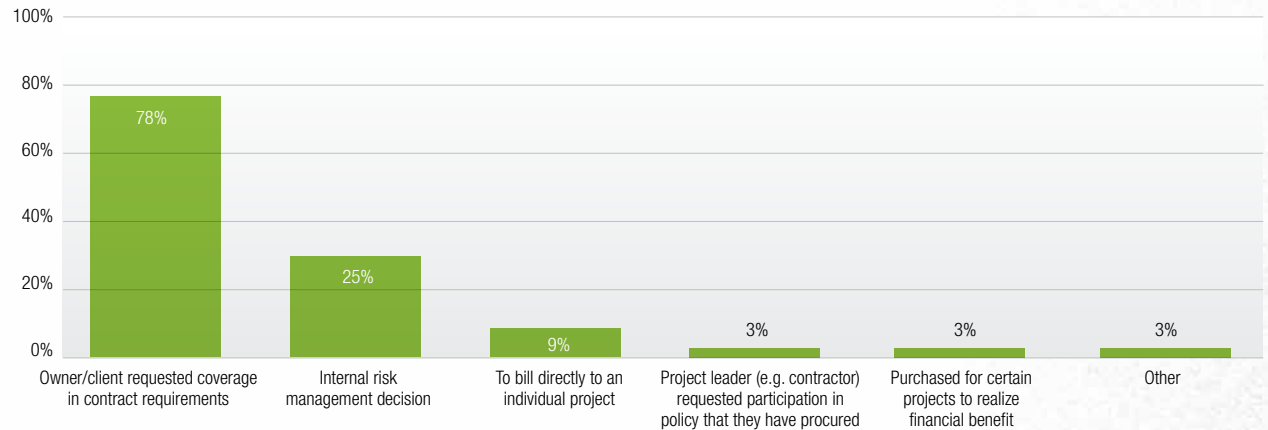
Number of projects typically covered by project-based professional liability insurance, percent of firms

	All firms	Number of employees						
		1	2-4	5-9	10-19	20-49	50-99	100+
All or almost all	22%	16%	24%	26%	23%	21%	11%	18%
Some or most	5%	4%	5%	6%	6%	8%	11%	3%
Few	8%	5%	6%	7%	14%	20%	32%	47%
None	65%	75%	65%	61%	57%	51%	46%	32%

figure 6.3

**OWNER/CLIENT REQUEST IS MOST POPULAR REASON FOR PURCHASING PROJECT-BASED PROFESSIONAL LIABILITY INSURANCE**

Reasons for purchasing project-based professional liability insurance in 2011, percent of firms that purchased in 2011





- At 7 percent of total gross billings in 2011, the share of architecture firm billings from international projects is more than double that of a decade ago, but has remained flat in recent years.

- Nearly one in ten firms (8 percent) had international billings in 2011, while 13 percent of firms worked on international projects in the past three years.

- More than two-thirds of international billings in the last three years were from projects in Asia, the Middle East, or Latin America.

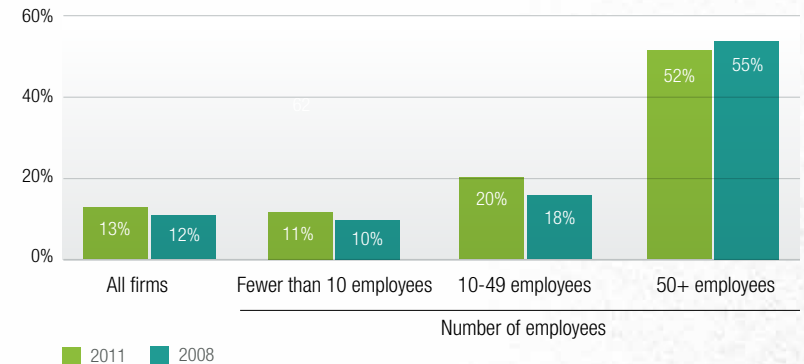
International work is defined as billings from outside the United States for either international or U.S. clients and inside the United States for international clients. In 2011, firms reported that more than 7 percent of total billings originated from international work. International billings accounted for almost \$2 billion of architecture firm billings in 2011 and, for larger firms, can be an important segment of business. Overseas work remains a small share of billings for most U.S. architecture firms, with just 8 percent reporting having had international billings in 2011.

#### NUMBER OF FIRMS INTERESTED IN INTERNATIONAL WORK STAYS STEADY

In general, the share of firms with overseas work between 2009 and 2011 remained unchanged from the 2006–2008 period, as approximately 13 percent of firms reported work on international projects over the past three years (figure 7.1). However, more than half of firms with 50 or more employees reported involvement with projects built outside the United States or for international clients during the past three years. One in five firms with 10 to 49 employees worked on international projects in the last three years. This share was one in ten for small firms.

figure 7.1 | LARGE FIRMS ARE MORE LIKELY TO BE INVOLVED WITH INTERNATIONAL WORK

Percent of firms with international projects in the last three years



International billings still represent a small part of the design market for U.S. architecture firms. Almost 8 percent of firms reported international billings in 2011, accounting for nearly 7 percent of gross billings across the profession. Large firms had the largest share of total 2011 international firm billings, 62 percent, while small and midsize firms each had just over 20 percent of international billings, a modest decline of 2 percentage points from 2008 for each of these groups (figure 7.2).

Of the firms with international billings in 2011, approximately half were from projects for international clients built outside the United States, which accounted for more than 3 percent of total gross billings. Projects built in the U.S. for international clients as well as projects for U.S. clients (other than the federal government) built outside the United States accounted for another 1.6 and 1.7 percent of gross billings respectively. International projects for the U.S. government accounted for the remaining 0.4 percent of gross billings (figure 7.3).

figure 7.2 | LARGEST FIRMS HAVE THE GREATEST SHARE OF INTERNATIONAL BILLINGS

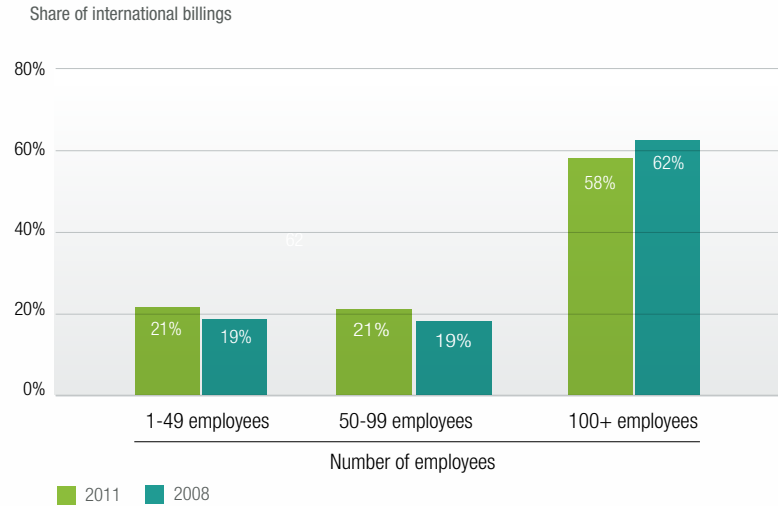
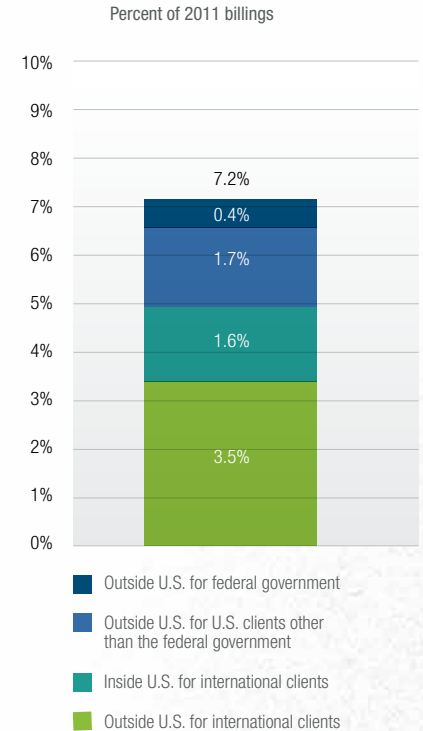


figure 7.3 | MAJORITY OF 2011 INTERNATIONAL BILLINGS ARE FROM PROJECTS OUTSIDE THE U.S.





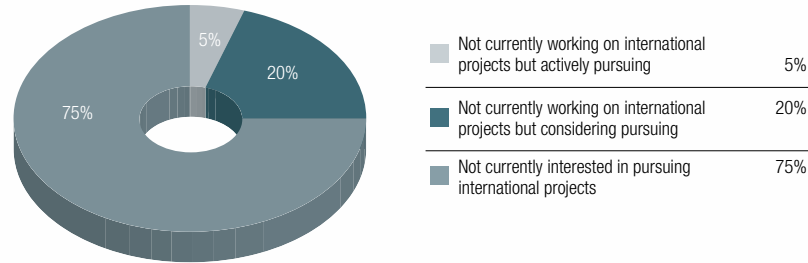
Overall, few firms that are not currently working internationally are likely to pursue such work in the near future. Of firms that have not had any international projects in the last three years, three-quarters were not interested in pursuing international projects (figure 7.4). For the one-quarter that are interested in overseas work, approximately one in five were actively pursuing such work within the past three years, while four in five were considering pursuing international opportunities. Global opportunities are driving more interest in international work, as only 18 percent of firms were actively pursuing or considering pursuing international projects in 2008.

**THE MIDDLE EAST, LATIN AMERICA, AND ASIA MAKE UP THE MAJORITY OF INTERNATIONAL BILLINGS IN THE PAST THREE YEARS**

The majority of international billings in the past three years were derived from projects located in the Middle East, Latin America (including the Caribbean and Mexico), and Asia (including China, East Asia and the Pacific, and South Asia). Western Europe, Eastern Europe, and Central Asia combined produced just under 10 percent of international billings, while an additional 10 percent were from Canada (figure 7.5). The two remaining regions that contributed to international billings in the past three years were Africa, with nearly 8 percent, and South America, with 5 percent.

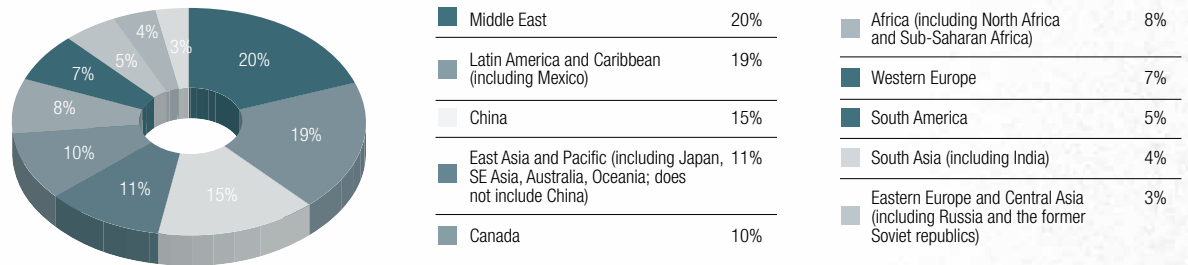
*figure 7.4* MOST FIRMS WITHOUT INTERNATIONAL WORK ARE NOT INTERESTED IN PURSUING IT

Percent of firms without international work in the last three years



*figure 7.5* MORE THAN HALF OF INTERNATIONAL BILLINGS IN THE PAST THREE YEARS DERIVED FROM THE MIDDLE EAST, LATIN AMERICA, AND CHINA

Percent of international billings in the past three years for projects outside of the U.S.



For the largest firms, more than half of international billings in the last three years were from the Middle East and China alone. At firms with 10 to 49 employees, East Asia and the Pacific, Canada, Latin America, and Western Europe composed an important share of their international projects. For small firms, Africa was a significant region, with more than 10 percent of international billings in the past three years.

### MOST FIRMS RELY ON IN-COUNTRY PARTNERS FOR INTERNATIONAL WORK

More than one-half of firms that work on international projects indicate that they typically team up with an in-country partner for overseas projects (figure 7.6). Two in five reported that they never team up with in-country partners for work overseas. Large firms are more likely to use in-country partners because projects tend to be larger and in-country knowledge plays a greater role. More than 2 in 5 firms with 50 or more employees are likely to use in-country partners on overseas projects while only half of small firms and approximately two-thirds of firms with 10 to 49 employees do so.

U.S. firms tend to do the design work themselves but rely on in-country partners for contract and negotiation assistance for international projects (figure 7.7). An average of 70 percent of firms provides schematic design, predesign/consulting, and design development work for international

figure 7.6

### MORE THAN HALF OF FIRMS TEAM UP WITH IN-COUNTRY PARTNERS FOR INTERNATIONAL PROJECTS

Share of firms relying on in-country partnership, percent of firms with international billings in the past three years

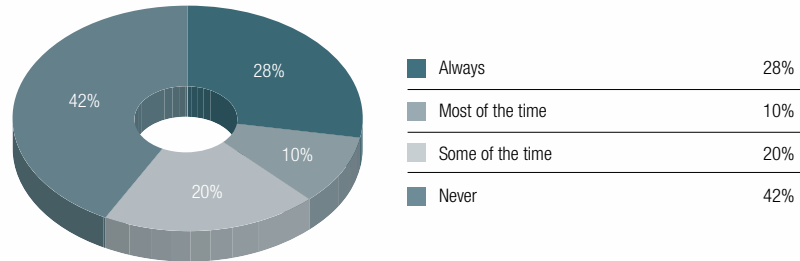
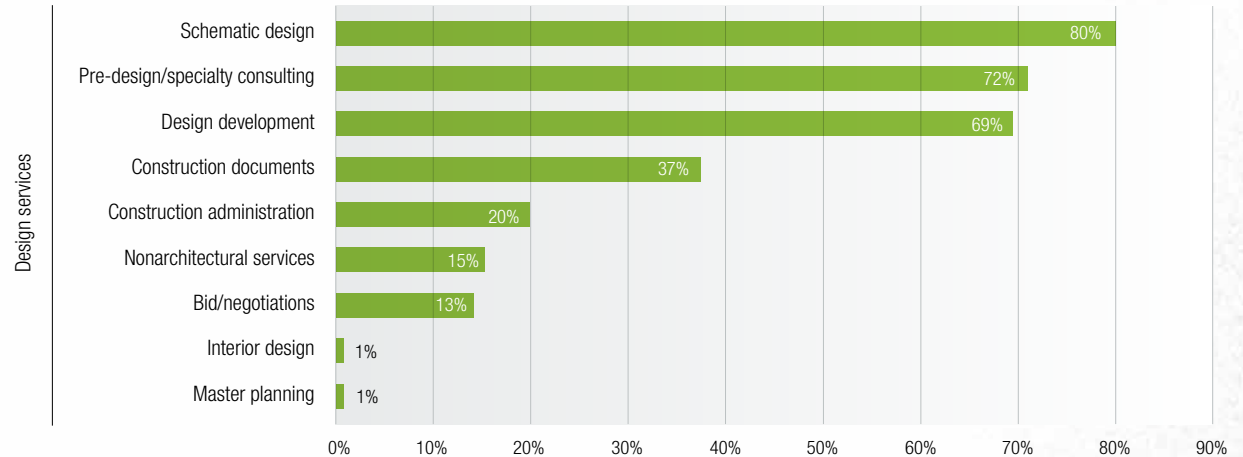


figure 7.7

### NEARLY ALL FIRMS PROVIDE DESIGN SERVICES FOR INTERNATIONAL PROJECTS

Firms with international projects in the past three years, percent of firms (multiple answers permitted)



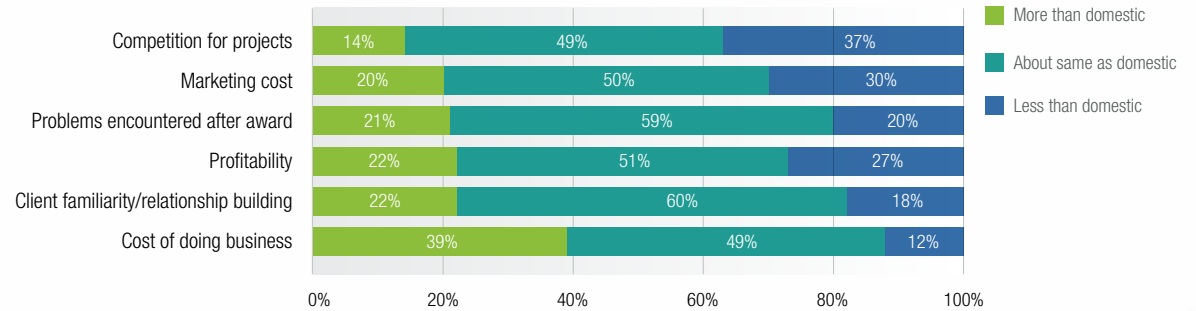
projects. Construction documents and construction administration round off the list of the top five services that are most often provided for foreign projects. The majority of firms report that they do not provide interior design and master planning services for international projects, as those may be better handled by local staff due to cultural customs and regulatory requirements specific to the given country.

### THE OVERALL COST OF DOING BUSINESS IS HIGHER FOR INTERNATIONAL PROJECTS THAN FOR DOMESTIC PROJECTS, BUT MARKETING COSTS ARE LOWER

International projects offer firms both advantages and disadvantages. Firms reported in the 2011 survey that the average cost of doing business is higher for international projects compared to domestic projects, which was also true in previous surveys (figure 7.8). Furthermore, building client relationships tends to require more effort for international projects, as learning new business and cultural practices come into play. Marketing costs tend to be lower for international projects, probably owing to less competition. Profitability, however, tends to be slightly lower for international projects, and two in five firms say that the cost of doing business is higher for international projects than domestic ones.

figure 7.8 | COST OF DOING BUSINESS IS HIGHER FOR INTERNATIONAL WORK, WHILE PROFITABILITY IS LOWER

Cost and business engagement, comparison between international versus domestic, percent of firms



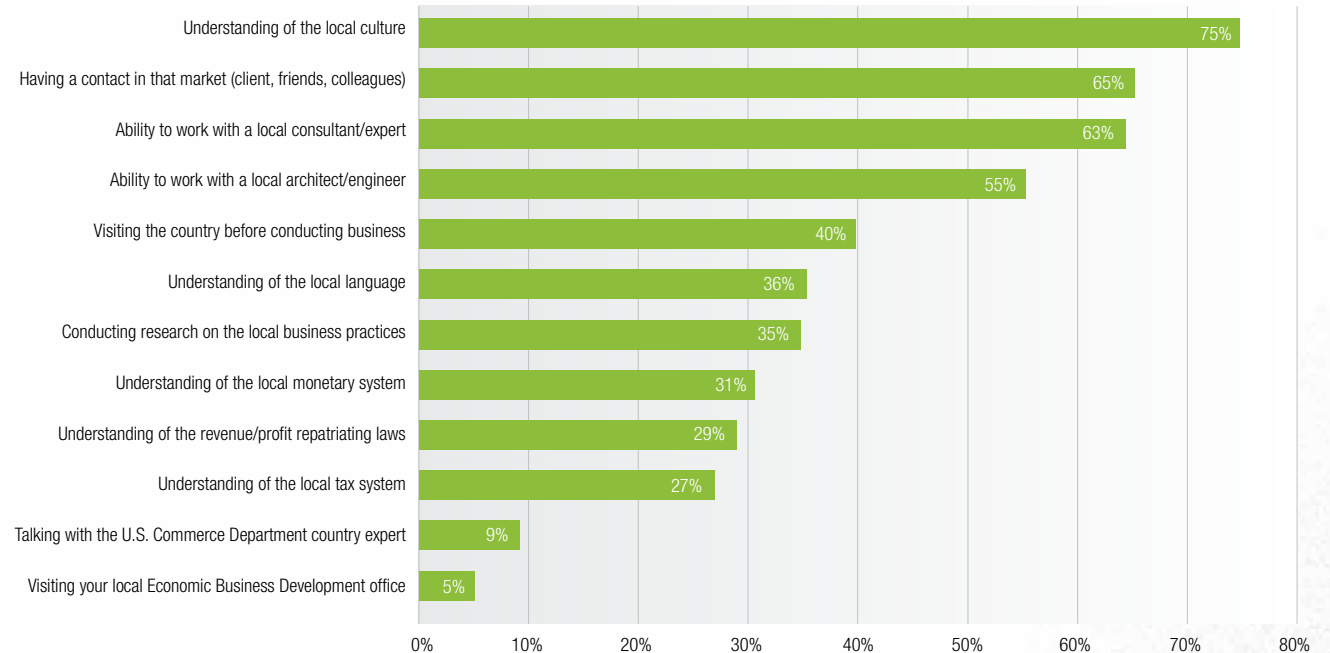
Understanding the local culture is the factor that the largest share of firms takes into account when preparing to enter a foreign business market (figure 7.9). Many firms also take into account relationship dynamics—such as having clients, friends, and colleagues in the market—as well as the ability to work with local consultants, architects, and engineers.

Secondary business environment analyses are important as well. On average, one-third of firms conduct research on local business practices, visit the country, and have an understanding of the local language. Regulatory factors to take into account include understanding the local monetary system, tax regulations, and revenue repatriation. Few firms report using such governmental advisors as the U.S. Commerce Department and local economic development offices. However, approximately one in three firms with 100 or more employees that have international work do use the U.S. Commerce Department, whereas fewer than 1 in 10 firms of all sizes do so on average. ■

figure 7.9

## MANY FIRMS TAKE CULTURAL UNDERSTANDING AND PREEXISTING RELATIONSHIPS INTO ACCOUNT WHEN PREPARING TO ENTER A FOREIGN MARKET

Foreign business market assessment factors, of firms that have worked on international projects in the last three years, percent of firms (multiple responses allowed)



**BACKGROUND**

The AIA has surveyed architecture firms since 1988 as part of a commitment to maintain an accurate profile of the business practices of the profession. The 2012 Firm Survey examined many of the issues explored when the survey was conducted in 2009.

Survey content was developed by AIA staff and volunteer leaders. Sampling, data collection, and tabulation were handled with the assistance of Readex Research, an independent research company.

**SAMPLE COMPOSITION**

The population of interest was all domestic offices of U.S. architecture firms. The sampling framework was developed from three list sources: members of AIA's Large Firm Roundtable, AIA's firm owner/partner members, and participants in the 2009 Firm Survey. When duplicates were removed to include only one individual per location using carrier route and delivery point bar code information, this list included a total of 10,827 offices. Of these, 10,405 had deliverable e-mail addresses on file.

**DATA COLLECTION**

On February 2, 2012, Readex broadcast an initial e-mail (in the name of AIA's president) to all 10,827 sample members, inviting them to participate in the survey by visiting the access-controlled Web site hosted by Readex. Of these, 10,405 had deliverable e-mail addresses on file. As an incentive to participate, respondents were entered into a drawing for one of five \$100 American Express gift cards if their response was received on or before February 15, 2012.

On February 8, reminder e-mails were sent in the name of AIA's president to the 9,500 sample members whose initial e-mail had not bounced back as undeliverable (422 had) and who had not yet submitted a survey.

A second reminder e-mail to 8,568 nonrespondents was broadcast February 14, announcing the deadline for participation as February 22. Those who had partially completed the survey were sent a slightly different reminder than those who had not yet begun the survey. A final contact was made February 23 to all nonrespondents, indicating the deadline had been extended to February 27.

*figure A.1* | **SAMPLE AND RESPONSE COMPOSITION BY REGION**

AIA region	Percent in sample	Unweighted responses	
New England	7%	191	7%
Middle Atlantic	15%	399	14%
East North Central	11%	331	12%
West North Central	6%	175	6%
South Atlantic	18%	494	18%
East South Central	3%	105	4%
West South Central	10%	289	10%
Pacific Northwest	5%	191	7%
Pacific Southwest	23%	623	22%
Other (GU, PR, VI)	< 0.5%	7	< 0.5%
Total	100%	2,805	100%



The survey was closed for tabulation on February 28, 2012, with a total of 3,023 raw returns—a 29 percent response rate based on the net effective mailout of 10,405. Duplicate responses were removed after comparing respondent location and contact information. Returns were also considered unusable if they met any of the following criteria:

- From offices outside the US
- More than 350 total paid staff reported (assumed to be answering for multiple offices combined)
- Response was missing to any of three key questions: location, number of paid staff, or 2011 gross billings
- Respondent indicated retired/unemployed at any question with an “other/please specify” option
- Less than \$5,000 in 2011 gross billings were reported
- The 2011 gross billings divided by the total number of paid staff was greater than \$20 million (considered an outlier)

From the raw returns, 218 were discarded as duplicated or unusable based on these criteria. Tabulated results are based on a total of 2,805 usable responses. Because a significant fraction of those invited to participate chose not to do so, the possible effects of nonresponse bias on these results should be considered. Percentages based on all 2,805 responses are subject to a margin of error of  $\pm 1.6$  percent at the 95 percent confidence level. Percentages calculated on smaller tabulation bases—for example, offices in New England—are subject to more statistical variability.

#### SAMPLE REPRESENTATIVENESS AND WEIGHTING

No weighting by region was deemed necessary. Figure A.1 shows that unweighted survey responses closely mirror the distribution of locations in the entire invited sample.

To more accurately represent all U.S. firms, data are weighted to restore correct proportionality by size.

Compared with AIA’s estimate of how offices distribute by size (number of employees) in the universe of all AIA member-owned firms, the unweighted survey responses somewhat under-represent the smallest firms (under 5 employees), while somewhat over-representing mid-size firms (5-49 employees).

figure A.2 | UNIVERSE AND RESPONSE COMPOSITION BY FIRM SIZE

Number of employees	Estimated universe		Unweighted responses	
1 employee	4,636	26%	700	25%
2–4 employees	6,450	37%	788	28%
5–9 employees	3,115	18%	589	21%
10–19 employees	1,727	10%	338	12%
20–49 employees	1,018	6%	208	7%
50–99 employees	348	2%	74	3%
100+ employees	237	1%	92	3%
Total	17,531	100%	2,805	100%

**1** NEW ENGLAND

- Connecticut
- Maine
- Massachusetts
- New Hampshire
- Rhode Island
- Vermont

**2** MIDDLE ATLANTIC

- New Jersey
- New York
- Pennsylvania

**3** EAST NORTH CENTRAL

- Illinois
- Indiana
- Michigan
- Ohio
- Wisconsin

**4** WEST NORTH CENTRAL

- Iowa
- Kansas
- Minnesota
- Missouri
- Nebraska
- North Dakota
- South Dakota

**5** SOUTH ATLANTIC

- Delaware
- District of Columbia
- Florida
- Georgia
- Maryland
- North Carolina
- South Carolina
- Virginia
- West Virginia

**6** EAST SOUTH CENTRAL

- Alabama
- Kentucky
- Mississippi
- Tennessee

**7** WEST SOUTH CENTRAL

- Arkansas
- Louisiana
- Oklahoma
- Texas

**8** PACIFIC NORTHWEST

- Alaska
- Idaho
- Montana
- Oregon
- Washington
- Wyoming

**9** PACIFIC SOUTHWEST

- Arizona
- California
- Colorado
- Hawaii
- Nevada
- New Mexico
- Utah

