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).

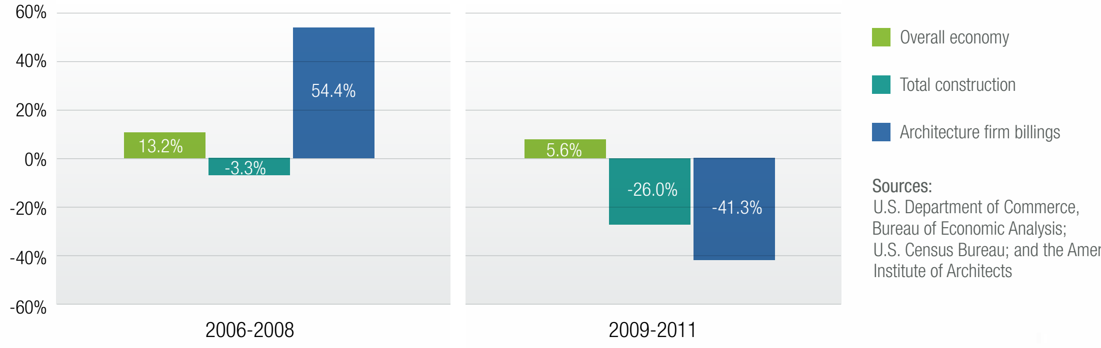
Such a significant reduction in firm revenue produced a comparable reduction in employment. Nationally, the decline in overall business payrolls throughout the economy over this period was one of the steepest since the Great Depression. From its high in early 2008 to its low in early 2010, almost 8.8 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

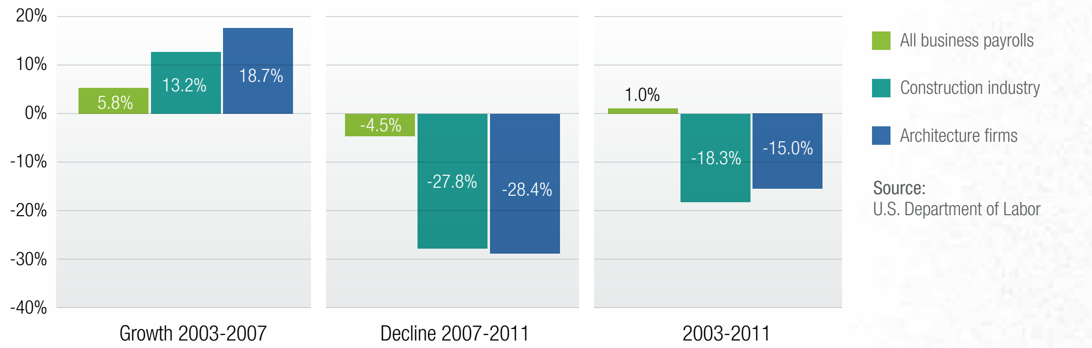
Total percent growth over period, not adjusted for inflation



Sources:
U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Census Bureau; and the American Institute of Architects

figure 1.2 EMPLOYMENT AT ARCHITECTURE FIRMS STILL BELOW LEVELS WHEN LAST UPTURN BEGAN

Total change in annual payrolls during upturn and downturn



Source:
U.S. Department of Labor

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 crashing and the nonresidential construction sector 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[1] 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

1 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 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).

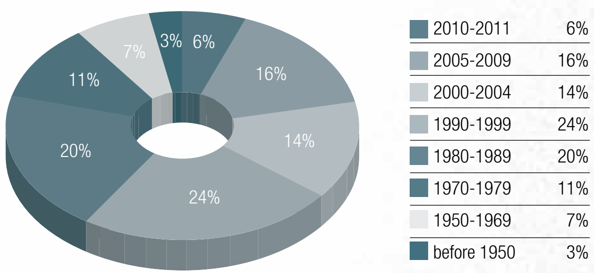
figure 1.4 EVEN WITH BENEFITS TO SCALE IN THE PROFESSION, MOST ARCHITECTURE FIRMS REMAIN SMALL

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

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
Architecture staff			
Principals/partners*	16%	17%	19%
Licensed	15%	15%	17%
Nonlicensed graduates**	14%	16%	13%
Interns/students	18%	12%	16%
Other design professionals			
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%
Technical/nontechnical* **			
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