

10th Annual AUGI



Salary Survey

Welcome to the results of your Salary Survey. This issue marks a decade of this unique resource, for users, by users. I give thanks to every one of you who took the time to volunteer a little bit of information to provide insight to all of the members in our organization. I would also like to give special thanks to Sandra Graham for her invaluable assistance.

On the last page of this article, I have collected data from all of our past surveys, so we can compare things which might have changed since this survey first ran. Enjoy taking a look back with AUGI.

HIGHLIGHTS

Not that this is a victory by any means, but, only 8 percent of our participants reported taking a pay hit this year (versus 15 percent for the past two years). Thirty-two percent of our respondents did not receive an increase in pay this year, which is an improvement over the nearly 40 percent who did not see an increase last year, but well behind the boom years of 2005-2008, where only 20 percent of members did not receive a raise.

The level of education of our membership continues to rise, with nearly 45 percent of respondents (versus only 26 percent 10 years ago) having earned a bachelor's degree or higher.

The highest paying industry remains Petroleum/Gas/Biofuels with the lowest paying being Education/Training.

BIM Managers, followed closely by CAD Managers and Tool Designers report the highest paying job titles with Drafters being paid the least.

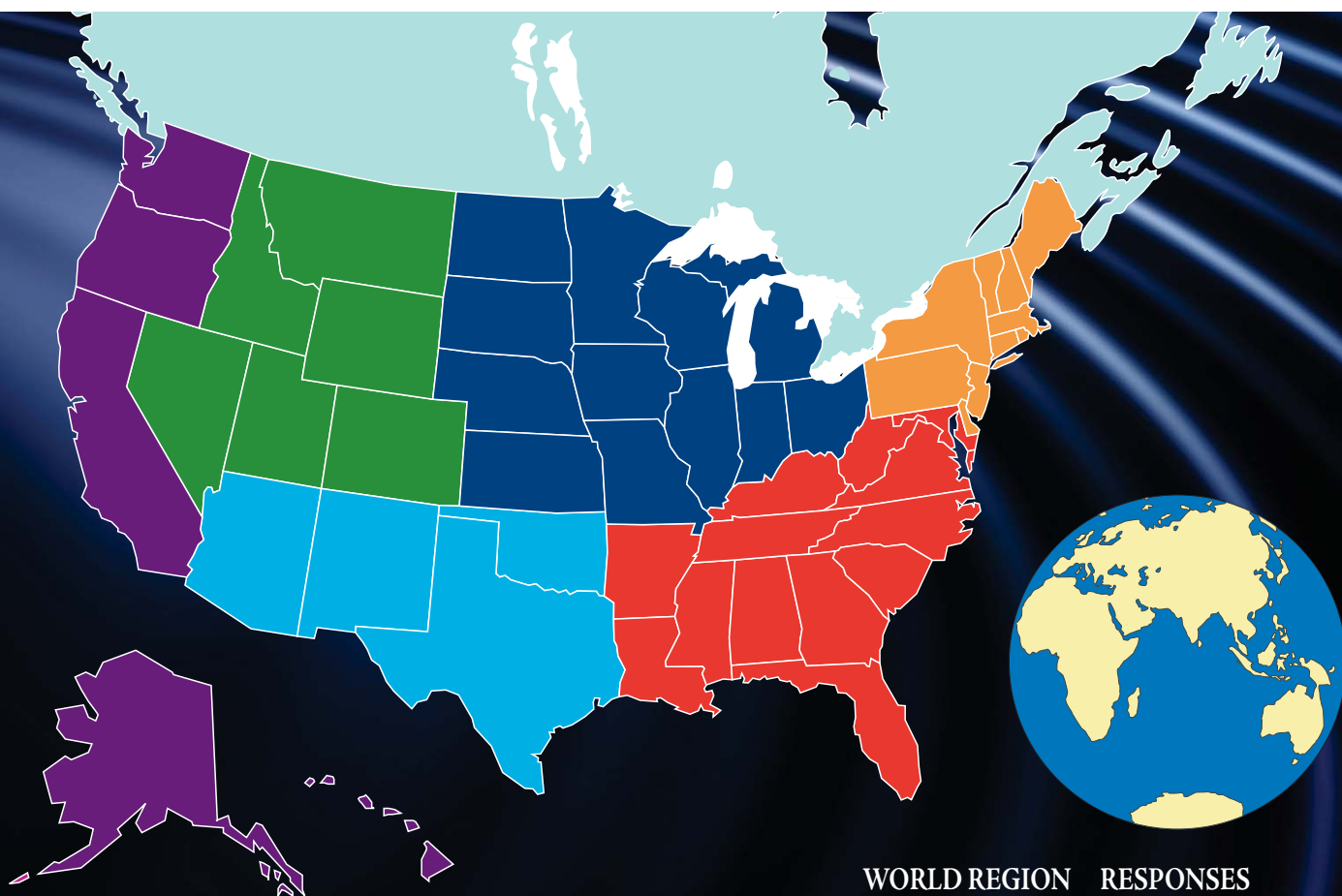
The average pay by Job Title and Industry are listed on the following pages, in order of their rate of participation in the survey.

REPORTS FROM THE TRENCHES

Three quarters of the members report feeling security with their job, this is only a slight increase over the past two years, and is a 10 percent decrease from 2006.

Seventy-one percent of users report feeling satisfied with their job, which has actually decreased again this year.

Admittedly, it will be difficult to draw firm conclusions based upon the numbers, but this year we asked our membership for the first time about any changes experienced in their employment. Five percent of those who responded to the question reveal that they experienced a layoff this year. Obviously there could be many more who have been laid off and did not participate, or who are no longer active with AUGI because of their change in job status. When looking at the educational backgrounds of those who have been laid off, the highest percentage went to those with High School Diplomas, at 7.8 percent. Those with two- and four-year degrees were under 5 percent, and those with Vocational educa-



US REGION	RESPONSES
ATLANTIC	411
MIDWEST	593
MOUNTAIN	159
PACIFIC	374
SOUTH	396
SOUTHWEST	301

WORLD REGION	RESPONSES
AFRICA	22
ASIA	251
CARIBBEAN	7
CENTRAL AMERICA	13
EUROPE	251
MIDDLE EAST	30
N. AMERICA (CANADA)	231
SOUTH AMERICA	30

tion came in the lowest with 2.8 percent of respondents. Drafters and Designers experienced higher percentages of layoffs at around 6.5 percent with IT Managers and Architects not being too far behind. CAD Managers, Engineers, Project Managers, Land Surveyors and Tool Designers fared the best.

Of responding users in the Architecture and Fuels fields, 6.3 percent reported losing a job this year, versus 2.3 percent in Facilities Management and 1.6 percent in Government. A recent report from the AIA's Home Design Trend Survey seems to indicate a relative stability in the residential market, which is a healthier trend than in recent years.

WHAT NEXT?

This is the eighth year I have administered the AUGI Survey. Although tweaks have been made, according to requests received from our members, I try not to make too many changes from year to year, so that we can have some continuity. But after a decade of running pretty much the same survey, I feel it is time for a change.

If the survey is starting with a clean slate, what do you think we should keep?

What questions should we ask that we haven't been asking?

How many questions should we ask—is a longer or shorter survey better?

I would love to hear your ideas. After reading the Frequently Asked Questions page <http://www.augi.com/surveys/salary-survey-results/salary-survey-questions-and-faqs/> please feel free to send your suggestions to salarysurvey@augi.com.

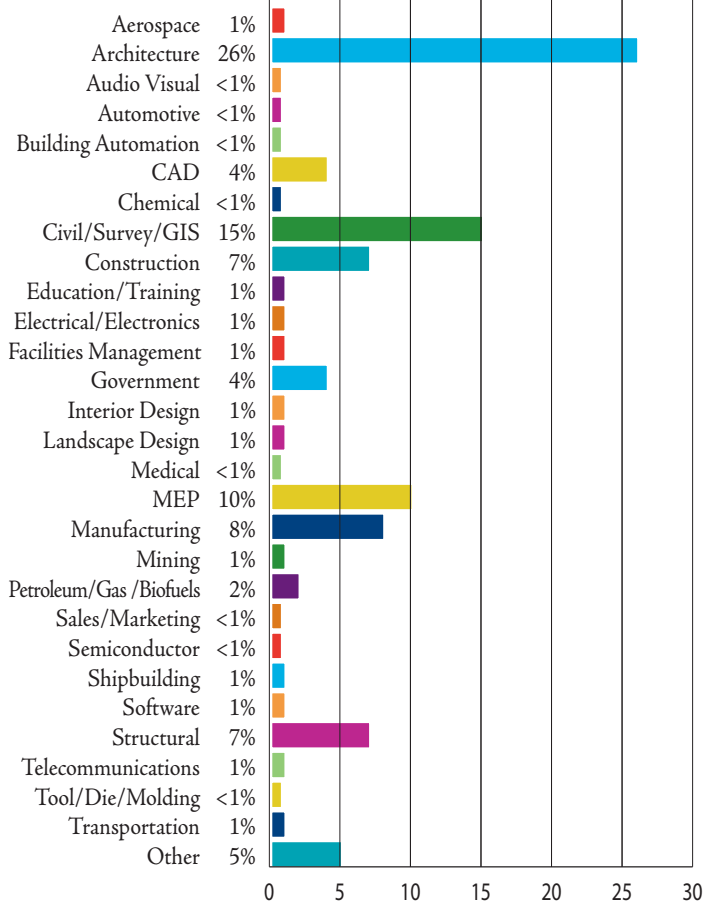
Additionally, I am planning on bringing examples of other surveys along to Autodesk University this year, so I can sit down and chat with a few users about my ideas and get some member feedback. If you'd like to join us for this informal discussion, please drop me an email so I can add you to the list of those who have expressed interest in helping brainstorm.



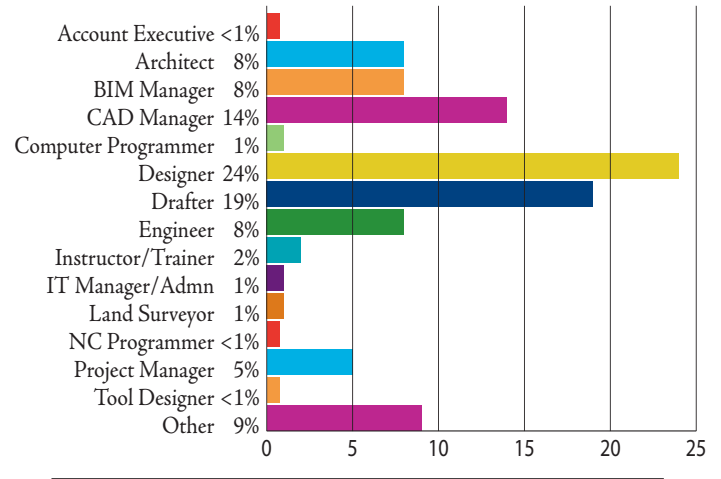
Melanie Perry is a Facilities-Management CADD Coordinator and a freelance Writer and Technical Editor. She is the AUGI Salary Survey Manager since 2004 and is currently serving as an Officer on the Board of Directors. Melanie can be reached at mistressofthedorkness@gmail.com, or found on Twitter as @MistresDorkness.

DEMOGRAPHICS

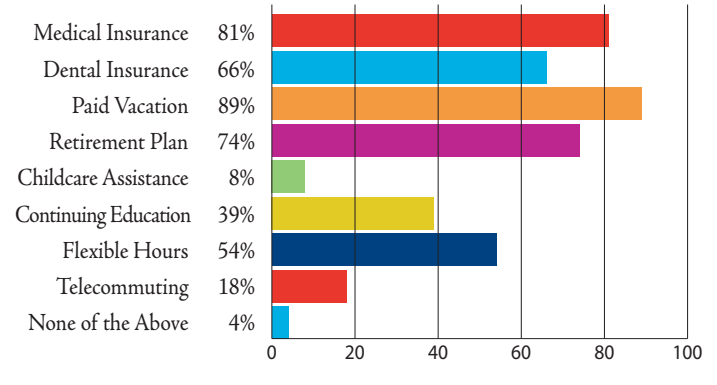
Field/Industry



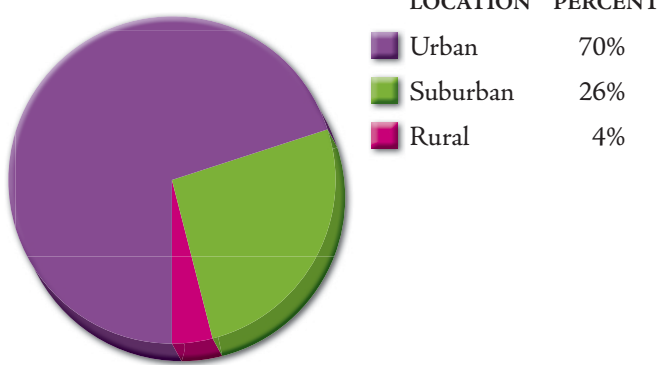
Job Title/Function



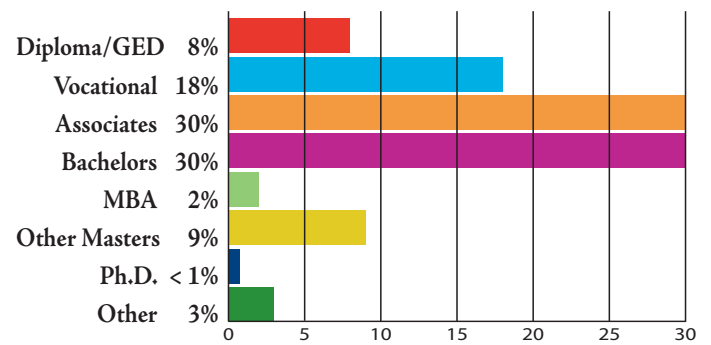
Employee Benefits



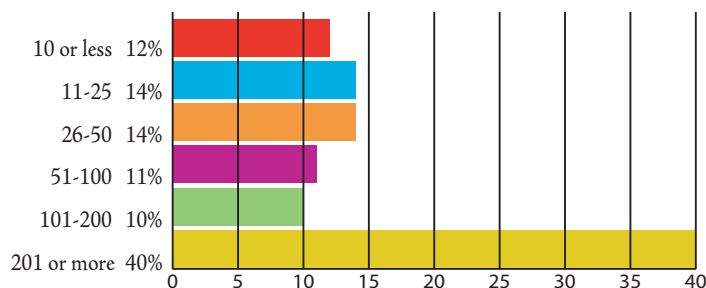
Work Location



Education Level/Degree Attained

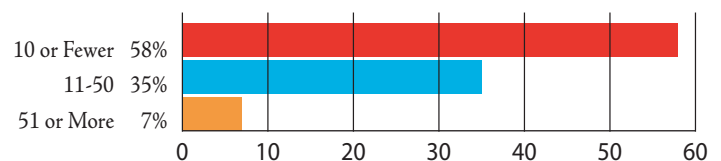


Company Size

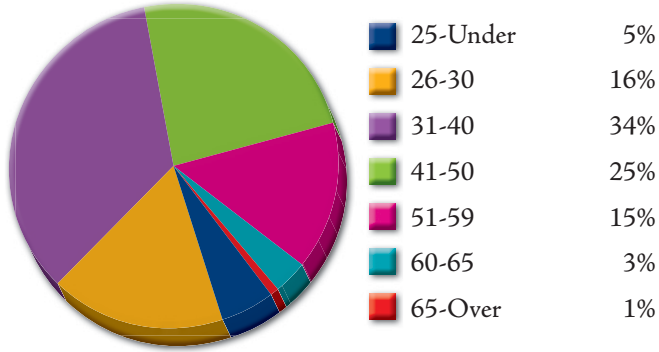


WorkGroup Size

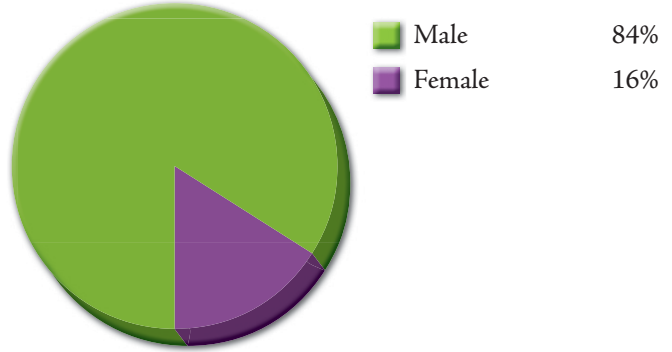
Department Size



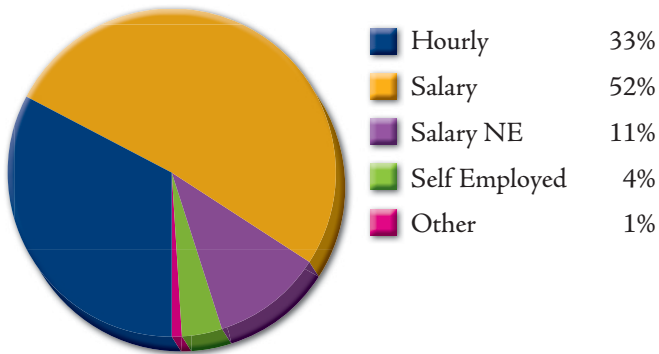
Employee Age



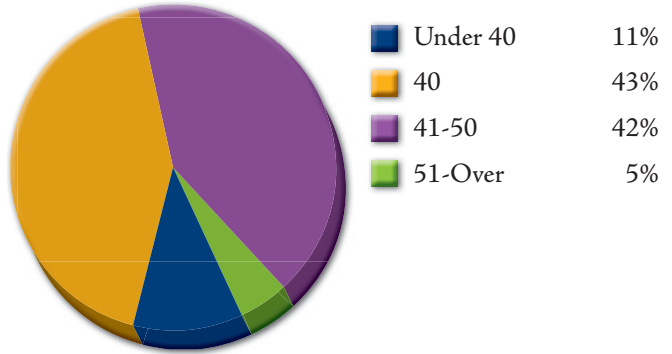
Employee Gender



Compensation

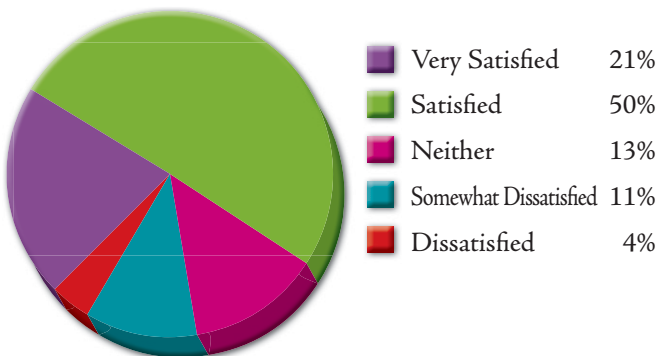


Hours Worked Per Week

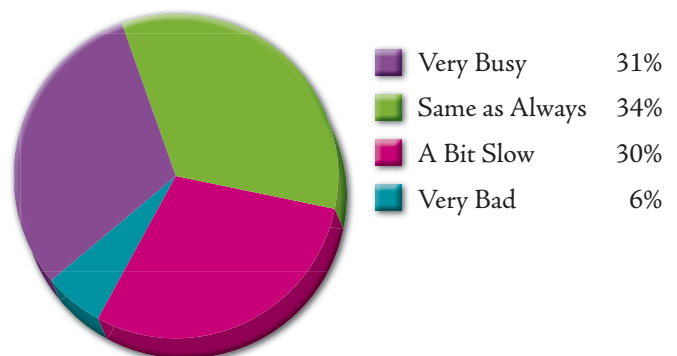


PULSE ON THE INDUSTRY

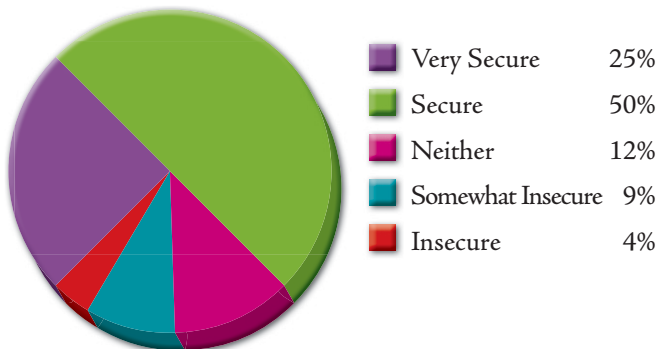
Feelings of Job Satisfaction



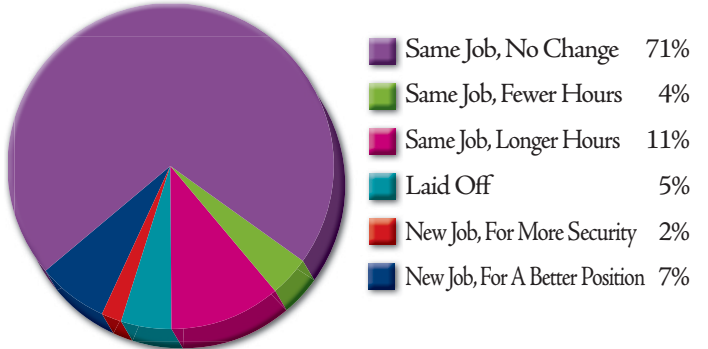
Current Workload



Feelings of Job Security

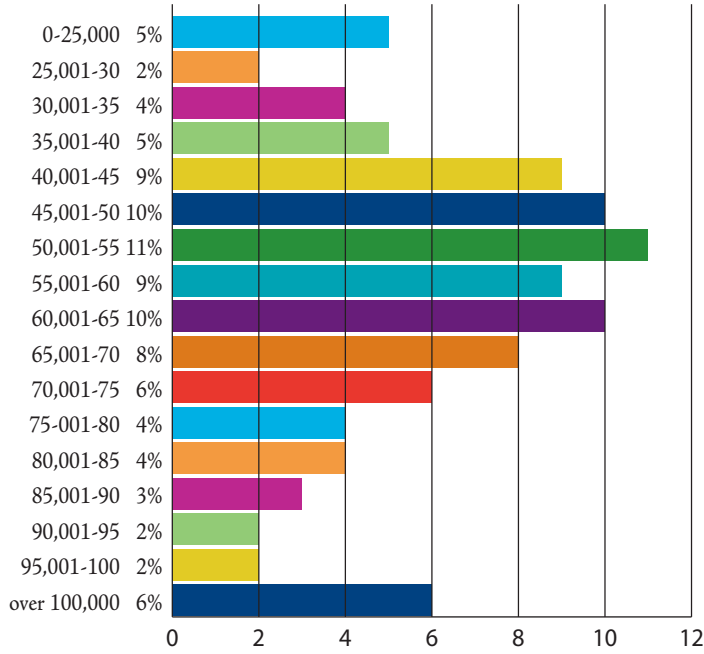


Change in Employment

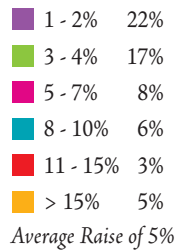
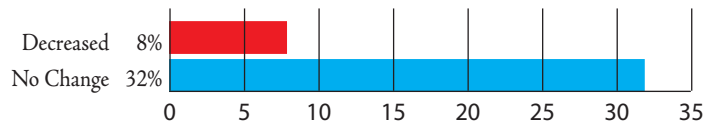


AVERAGE INCOME BY MAJOR FACTORS

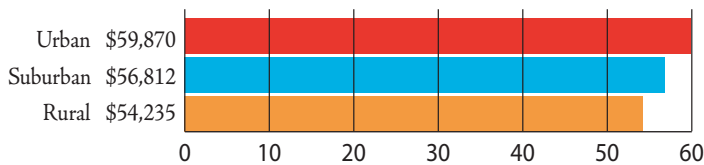
Annual Compensation in 2011



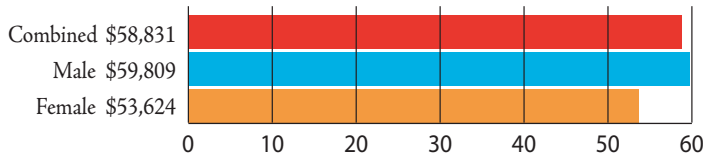
Salary Change This Year



Average Pay By Work Location

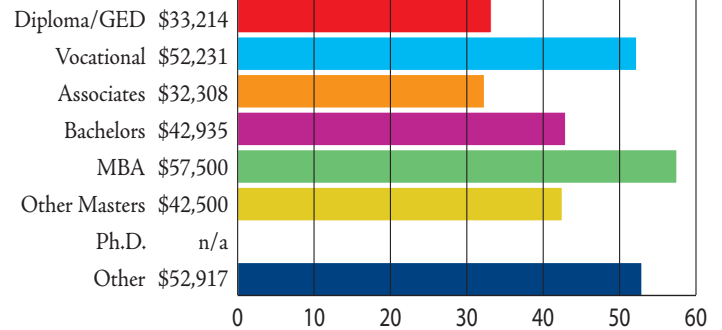


Average Pay Per Gender

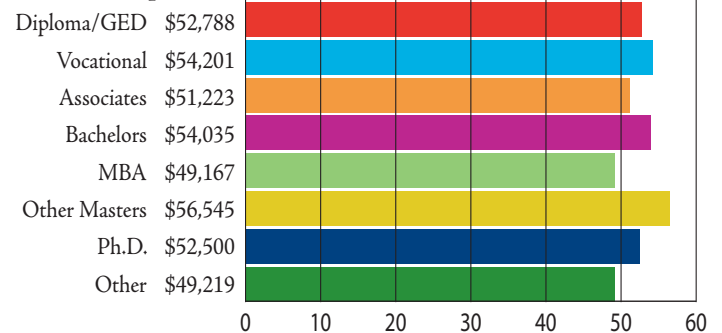


Average Pay By Education Level

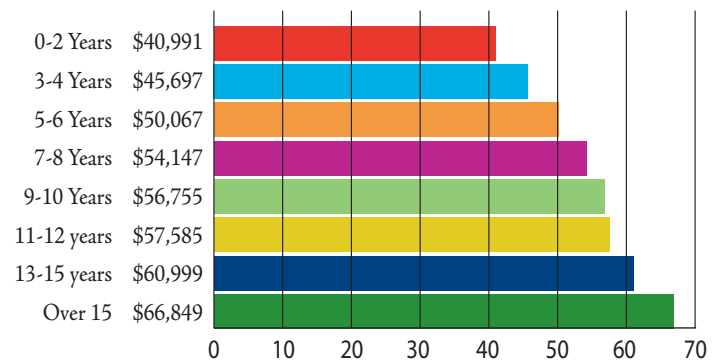
0-2 Years Experience



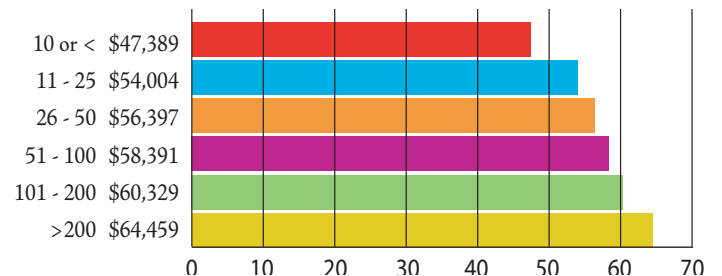
5-10 Years Experience



Average Pay By Years of Experience



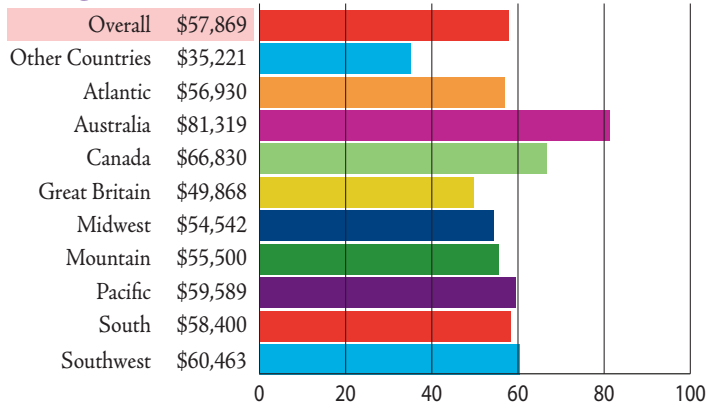
Average Pay By Company Size



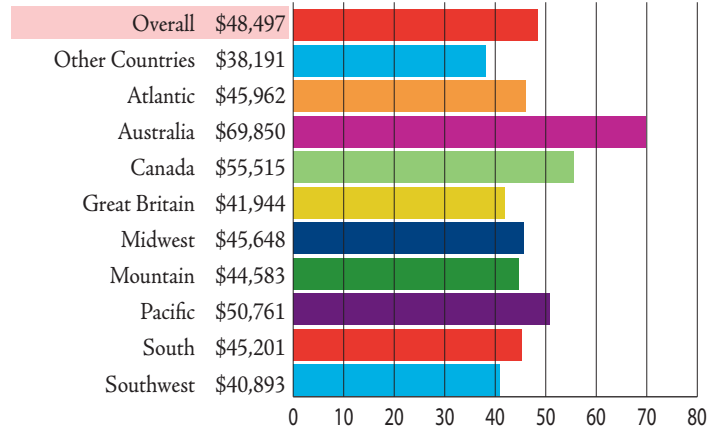
For simplicity's sake, all values are reported in US Dollars

AVERAGE INCOME BY JOB TITLE/FUNCTION BY REGION

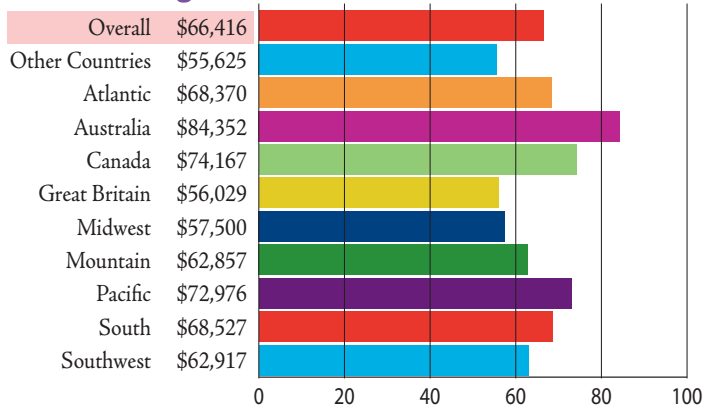
Designer



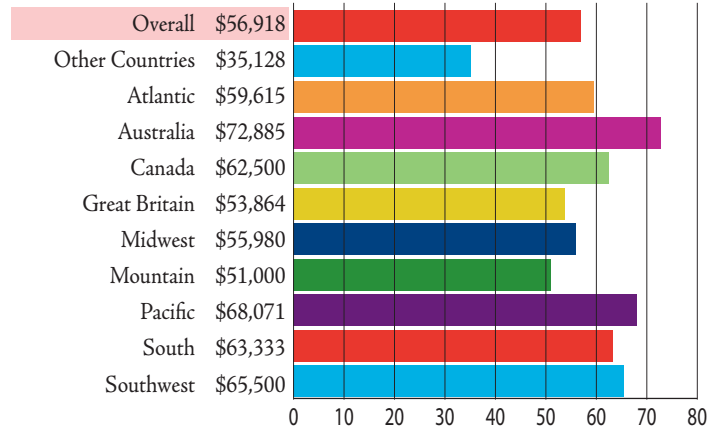
Drafter



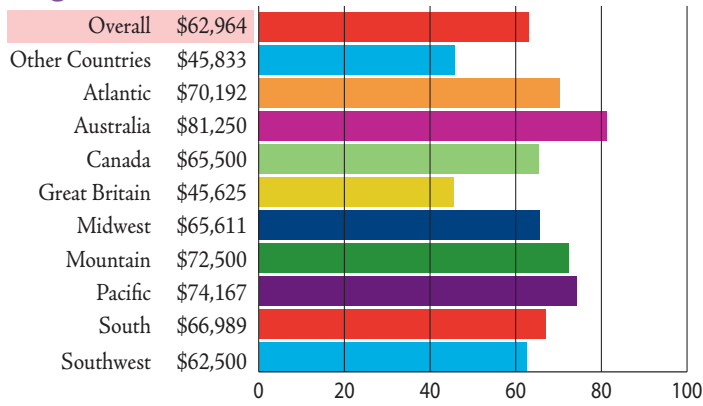
CAD Manager



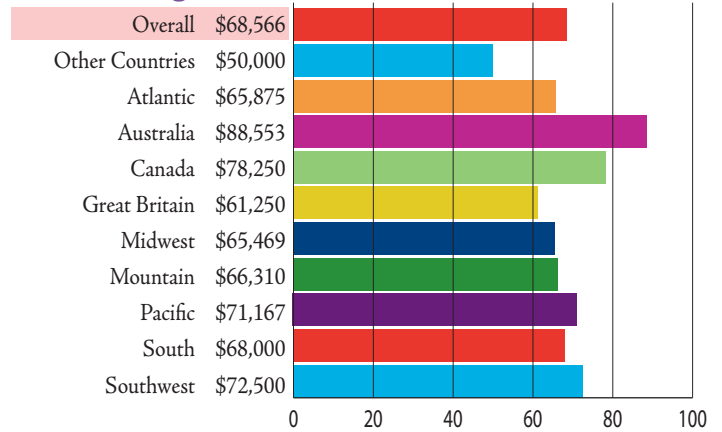
Architect



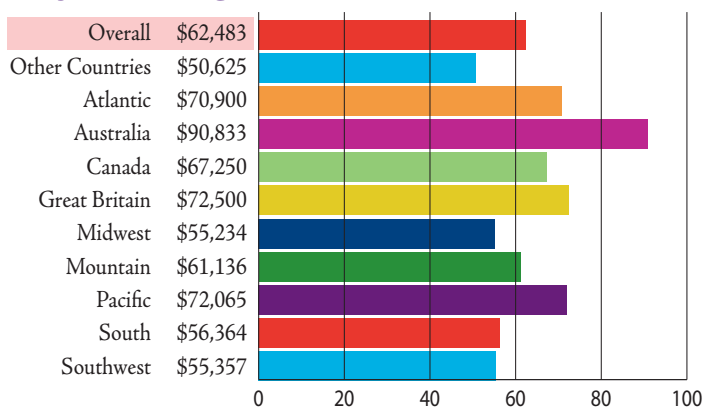
Engineer



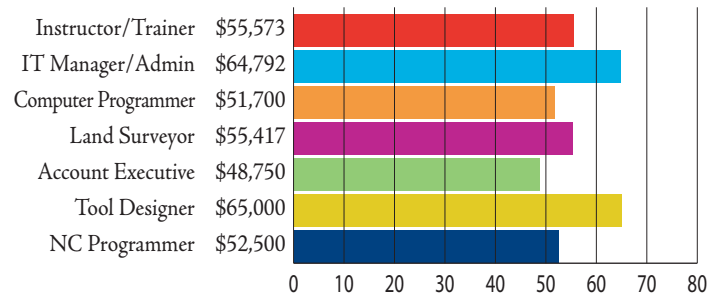
BIM Manager



Project Manager



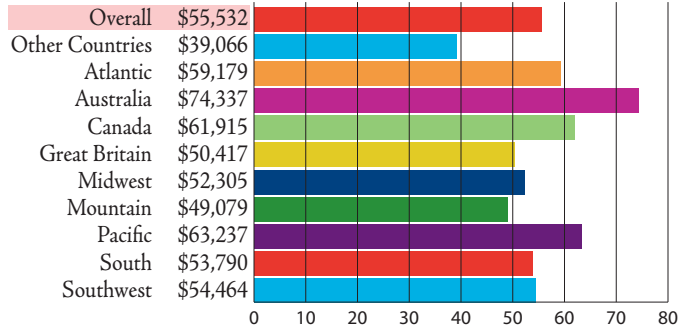
Job Title



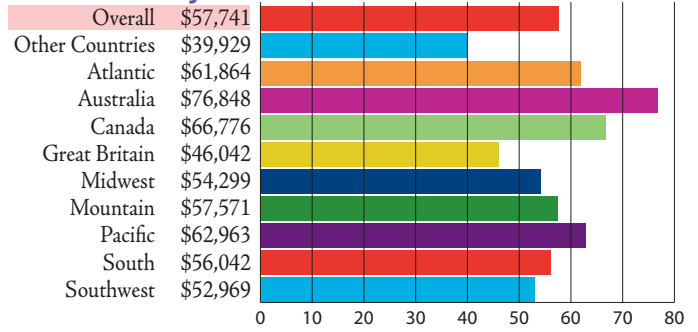
Not Enough Info for Regional Breakdowns

AVERAGE INCOME BY DISCIPLINE/FIELD/INDUSTRY BY REGION

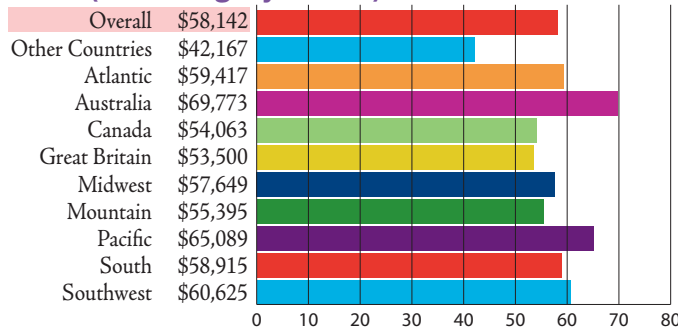
Architecture



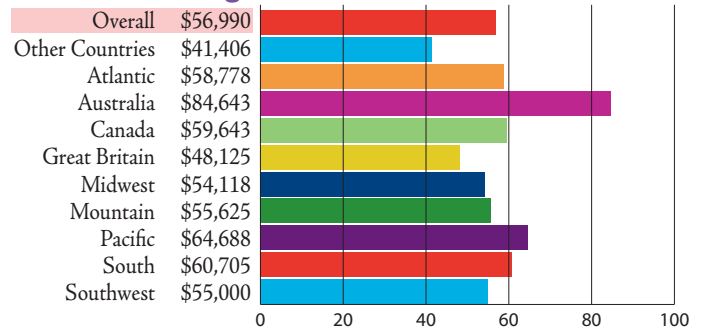
Civil/Survey/GIS



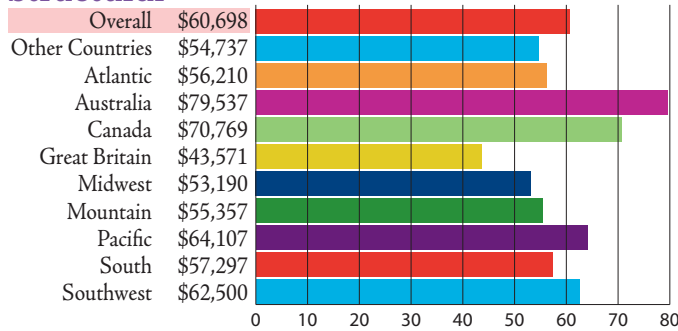
MEP (Building Systems)



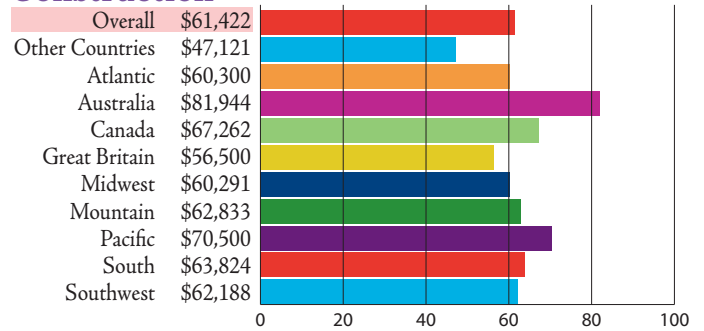
Manufacturing



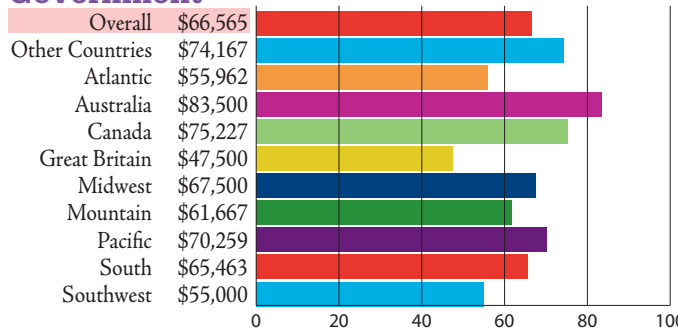
Structural



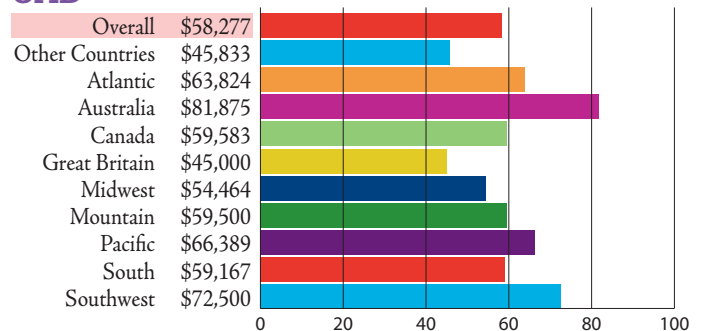
Construction



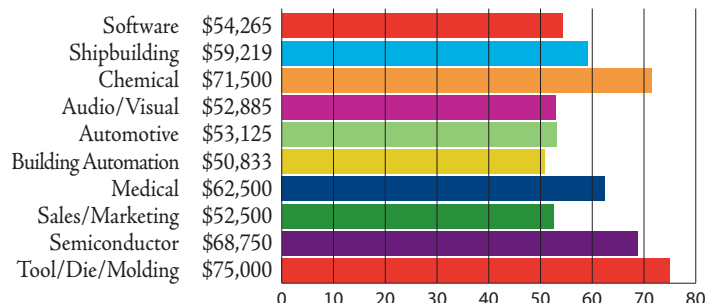
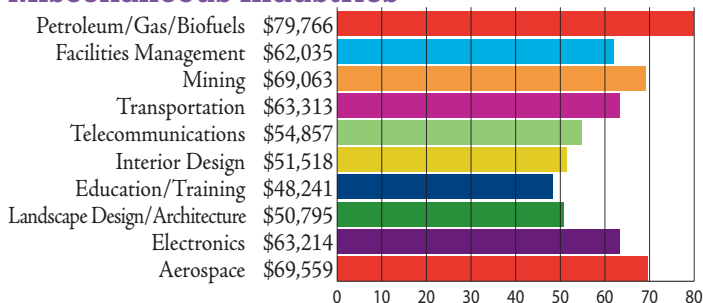
Government



CAD

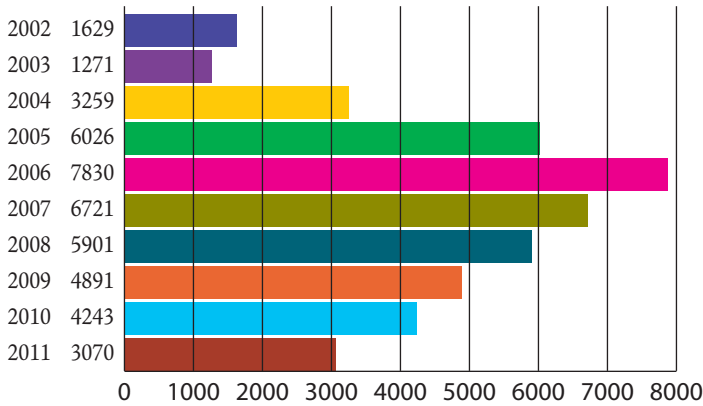


Miscellaneous Industries

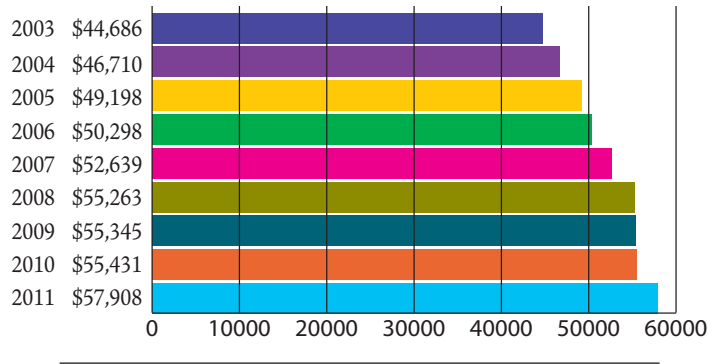


A LOOK BACK

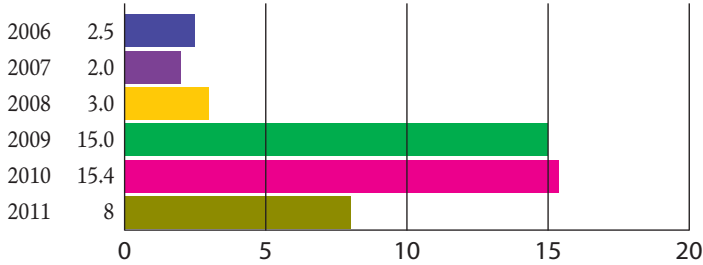
Responses to Survey



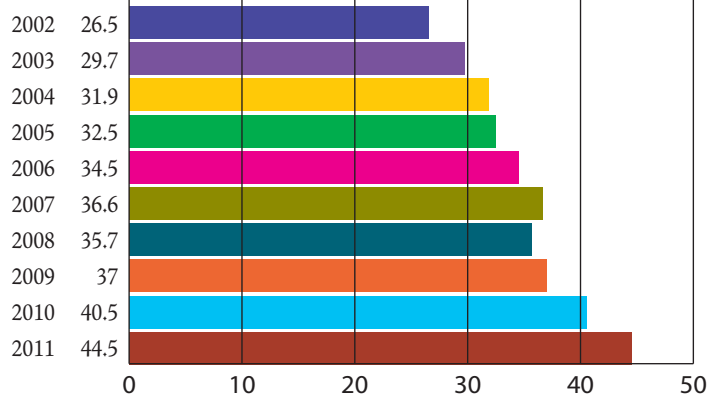
Average "Designer" Pay



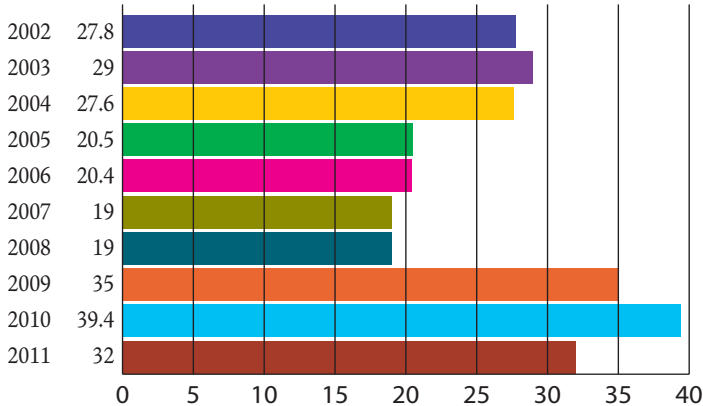
Percent of Users Who Experienced Pay Decrease



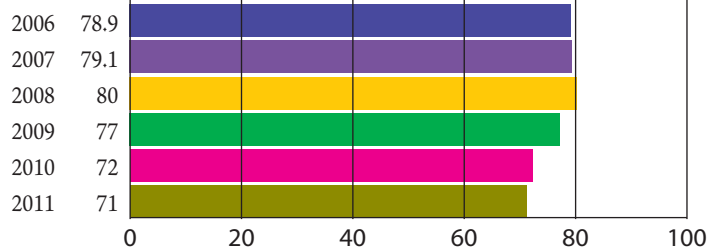
Percent of Members with Bachelor's Degree or Higher



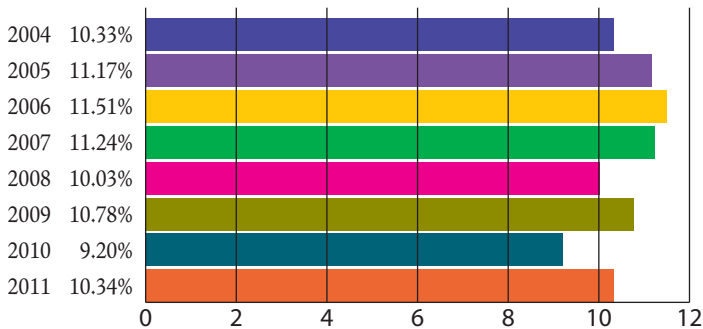
Percent of Respondents Who Received no Raise



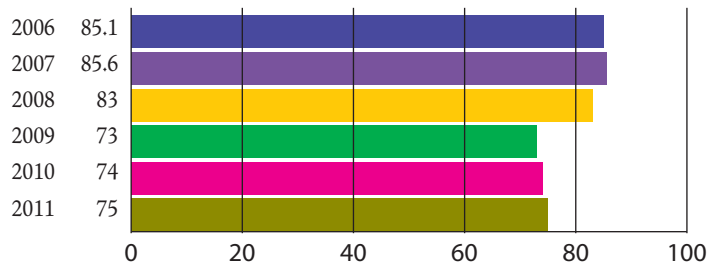
Percent of Users Who Are Satisfied



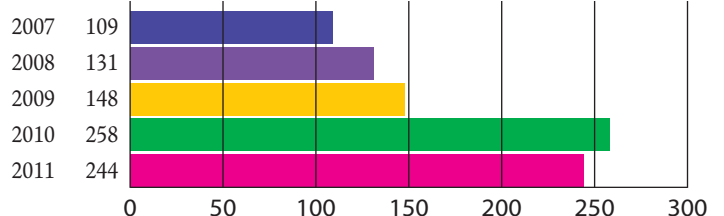
Percent of Female Pay Difference



Percent of Users Who Feel Secure



Number of BIM Managers



Up Next: Your Architecture Career, 3.0

The use of building information modeling (BIM) continues to grow among firms worldwide. While there is significant geographic variation, professionals who master BIM skills report higher earnings than their counterparts using CAD.



All the once-flat components of your world are turning three-dimensional, and not just at the movies. If it hasn't already, your career is quickly escaping its two-dimensional flatland as well.

If you think of ink on vellum as Your Career 1.0, computer-aided drafting as 2.0, then the 3D capabilities of building information modeling (BIM) constitute Your Career 3.0. And the uptake of BIM clearly has reached a tipping point.

In 2008, more than one-third of firms polled by the American Institute of Architects indicated they already had obtained BIM software, more than double the share in 2005. A separate report, this one by McGraw-Hill Construction, said that by 2009, just under half of architecture, engineering, and construction (AEC) firms had employed BIM.

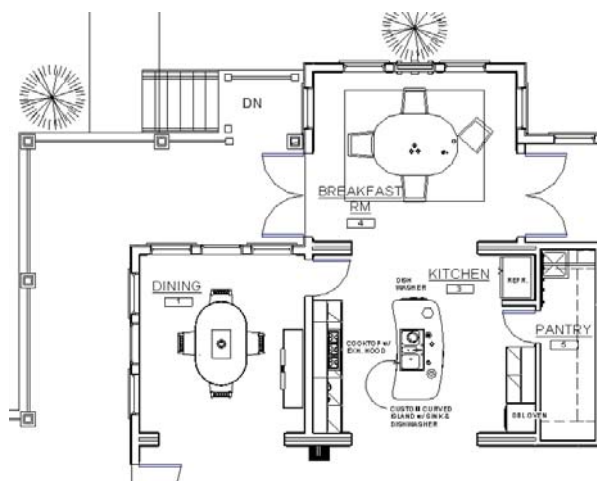
"Among areas that are emerging for the profession, I would certainly put BIM at the top of the list," says Kermit Baker, AIA's chief economist.

And it's clear that the spread of BIM is not just spreading widely across the industry, but reaching deep into the profession. Between 2009 and 2010, the proportion of respondents in the annual AUGI Salary Survey who identify themselves as BIM managers doubled, from 3 percent to 6 percent. And that's up from the 1.6 percent who identified themselves as BIM managers when the AUGI survey first provided this title option in the 2007 survey.

The introduction of a BIM survey question four years ago reflected AUGIWorld's growing appreciation of the importance of BIM as a professional specialization. The 2012 edition may distinguish between BIM and non-BIM designers to reflect the evolution of that position, says Melanie Perry, a St. Louis-based technical writer and editor who has for several years produced the survey.

INFORMATION, PLEASE

BIM itself has evolved over the years. McGraw-Hill's definition, the "process of creating and using digital models for design, construction, and/or operations of projects," is certainly serviceable. When drafting lines were supplanted with digital models infused with AEC information, architecture professionals were able to create more accurate and comprehensive project models. For the first time, all professionals at all stages of a project worked in the same virtual space—the BIM model.



CAD Drawing- drafting lines

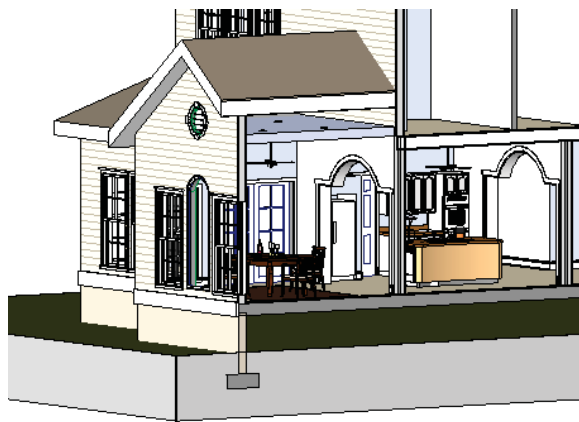
For many professionals, one of the most profound changes brought about by BIM appears to affect not just the output, but the very processes that define the industry. When a single BIM model contains all the specifications for a given project, "everyone is seeing the space the same way," says Rebecca Herr, a 2005 Georgia In-

stitute of Technology graduate who served as a senior designer in the Atlanta, Georgia, USA, headquarters of the international firm Smallwood, Reynolds, Stewart, Stewart (SRSS). "BIM is not just about the architect; it's a collaboration."

IT'S ABOUT TIME, IT'S ABOUT SPACE

Today, information imported into BIM models can include such fine detail as surface finishes and reflected light, with resolutions sufficiently high to produce realistic renderings of the finished product.

The most current BIM models incorporate the fourth dimension, time. Pulling data from the estimate and project logic models, BIM modeling depicts the sequential construction of a project in a simulated three-dimensional graphic. Estimates and design elements can be updated instantaneously, making it possible to respond to and visualize client requests in real time.



BIM Model- object oriented

SHOW ME THE MONEY

According to the most recent AIA survey, compensation at architectural firms remained flat between 2008 and 2011, reflecting in large part a struggling economy. But that same survey noted that almost a third of firms offer higher salaries for staff that have BIM expertise. Your chances for getting a BIM boost in salary were better—43 percent—at a firm with 100 or more employees. With fewer than 10 employees, the likelihood that a firm would offer a BIM premium dropped to 24 percent.

The latest available AUGI salary statistics, from 2010, further establish BIM's position as a compensation booster: overall, BIM managers reported an average annual salary of \$62,791, while the average annual salary for a CAD manager was \$62,014.

The 2011 figures are published in this issue of *AUGIWorld*.

The averages, though, mask significant variation among the 10 regions. In half of the regions surveyed—Pacific, South, Southwest, Australia, and Canada—BIM managers actually made less than their CAD counterparts. The place to be, in either professional mode, was Australia. There, CAD managers reported an annual salary of \$79,583 and their BIM colleagues averaged \$77,500 annually, making Australia easily the best-paying region in either field.

THE BOTTOM LINE

BIM professionals can command top dollar because their skills boost the bottom line of their firms. In that 2009 McGraw-Hill survey, 63

percent of BIM users said they saw positive ROI on their overall investment in BIM and 72 percent of users who formally measure their ROI on BIM report positive returns. Moreover, advanced BIM skills translate into higher returns: 87 percent of expert users reported a positive ROI with BIM compared to 38 percent of beginners.

The skills and training for BIM are considerable; even mastering a basic component can require weeks of intensive training. In the past, training by your friendly local Autodesk reseller was sufficient to handle basic CAD software, but in the days of BIM, firms have to reach out to the few architecturally trained and very experienced Mentors to guide their staff through multiple BIM projects. The AIA's Mr. Baker notes that, in the current economic slowdown, it is not uncommon for firms to make available BIM workstations where professionals can teach themselves BIM skills in anticipation of a stronger economy. This self-taught method of training, while resourceful, has led to inadequately trained staff, and often discovered too late to help the firm's latest BIM project.

USEFUL AT ANY STAGE

Right now, many architects think of BIM as best suited for the later, more complex stages of large-scale commercial projects; that was Ms. Herr's initial attitude at SRSS, where she worked on several large-scale efforts, including redevelopment of Atlanta's Buckhead commercial district. For some, the elaborate functionality of BIM may be more than is necessary in a project's early stages, where clients might like to brainstorm and work from rough sketches.

"In the beginning, you do a lot of work by hand. If your initial sketches are too finished or too polished, you might even scare a client a bit," she says.

But even there, BIM can rise to the occasion and provide an appropriate solution. Ms. Herr notes that in the early stages of a project, BIM output can be tweaked to resemble the rough renderings familiar both client and design professional.

WIDESPREAD APPLICABILITY

BIM processes can be incorporated into almost any stage of the design/build process. In addition, BIM is rapidly taking hold in facilities management, lease management, and asset management.

Still, BIM professionals are unlikely to work exclusively with three-dimensional modeling, says St. Louis editor Perry. Instead, managers and designers are more likely to switch back and forth between BIM and CAD as the professional establishes new professional and industry standards. "People who are flexible are going to be the ones who are successful," she says.

The AIA report can be purchased through the association's store at www.aia.org/store.



Elizabeth Connor, MA, MS, is a freelance technical writer and editor based in Roswell, Georgia, USA. She is affiliated with Advanced AEC Solutions, LLC, in Atlanta, Georgia, USA, and can be reached at econnor@aaecs.com.