How does your salary stack up?
How does $61,403 sound? That was the average of all 1,801 people who responded to salary information in a survey conducted of Game Developer magazine subscribers, Gamasutra.com members, and Game Developers Conference attendees.

With the help of research firm Market Perspectives, we sent e-mail to Game Developer magazine subscribers in July 2000 inviting them to participate in our survey and received 919 responses. Last November, we e-mailed invitations to all Gamasutra.com members to take the survey online and received 1,953 responses. Then, in March 2001, 1,797 GDC attendees took the survey on-site at computer terminals. Not all developers who participated in the survey answered the salary-related questions, which is why the total sample reflected in the data presented in the following pages, 1,801, is smaller than the total number of respondents. Besides cases where salary data was omitted from surveys, we also excluded cases where the salary was given at less than $10,000 or greater than $300,000 or where there was text entered in the salary box that did not represent a salary figure.

The sample represented in our salary survey can be projected to the game developer community with a margin of error of plus or minus 2.29 percent at the 95 percent confidence interval. That means that with the number of respondents in our sample, we can say with 95 percent certainty that the statistics would stay consistent across the entire population.

Another thing we can’t measure with these numbers is developers’ job satisfaction. If you make $60,000 per year and work 40-hour weeks, your average hourly rate for the year is $28.85. However, if you work 40-hour weeks for eight months of the year and 80-hour weeks for four months of the year, your average hourly wage for the course of the year ends up being $21.63, which is equivalent to $45,000 per annum for someone who works straight 40-hour weeks at that rate for the whole year. If there’s anything driving game developers to endure yet another crunch mode and bear the burden of time spent away from home and loved ones, it’s the satisfaction they get from contributing technical sparkle, artistic flourish, or innovative gameplay while bringing a unique form of entertainment to a wider audience. To say nothing of the sheer joy many developers take in actually getting paid to do something they’d gladly stay up all night in their spare room doing on their own time.

First published in Game Developer magazine, July 2001
About the IGDA
The International Game Developers Association is the independent non-profit association established by game developers to foster the creation of a worldwide game development community. The IGDA’s mission is to build a community of game developers which leverages the expertise of its members for the betterment of the industry and the development of the art form.

For more information on the IGDA, please visit www.igda.org or e-mail info@igda.org.
PROGRAMMING

WHO IS A PROGRAMMER? Our survey considered a “programmer” to be a person who described themselves as an engine programmer, AI programmer, tools programmer, hardware engineer, network programmer, or simply a programmer. It also includes people who have been around long enough to have the title of senior programmer as applicable to any of these job titles. A lead programmer is understood to be someone who is responsible for managing a team of other programmers and scheduling. A technical director or director of development is someone responsible for the overall management of a company’s technology decisions and might manage a single team of programmers at a small company, or a group of leads on various projects at a larger company.

“Programmers have it the best, salarywise. Good games programmers are extremely rare, and even mediocre ones are pretty rare. But a really good programmer, with a history in the industry, can command a huge salary.”

— programmer, California

Clearly, experience pays. It’s also much harder to hire for. If you’re looking for a programmer with at least three years’ game programming experience, you’ve already eliminated more than half of the game programmers out there, 54.3 percent, who have only one to two years’ experience in the industry. You can also expect to pay dearly for a seasoned lead programmer or technical director with six or more years’ experience.

WHAT EMPLOYERS WANT

Programmers are gold. If you’re a programmer who has published some titles, or can show that you have made and completed a game, it proves that you can finish what you start. A lot of developers have problems putting the finishing touches on things. Proving that you can finish what you start is very important to a potential employer. Many people can’t get a job because they have not completed a game, leading to the common catch-22 of first-time job-seekers. Lacking a published title, you should at least show a prospective employer that you can work to create something others have fun playing. Many companies ask developers for code samples. Your best bet is to have your résumé and a disk with code samples available, preferably code samples from a working game. — Jill Zinner
**ART**

**WHO IS AN ARTIST?** We received salary information from artists who defined themselves as animators, 3D artists/modelers, and 2D artists/texturers. We grouped lead artists and lead animators under the heading of “lead artists,” people who manage a team of artists and who construct schedules and help establish the artistic direction and feel of a game. Art directors might fill this same function at a smaller company, while at a larger company art directors might oversee a range of different products or manage the aesthetic of a product line with other leads under them.

Unlike in other game development disciplines we looked at in this survey, artists' salaries seemed relatively scattered across years of experience and level of responsibility. This may suggest that salaries offered to artists are more subjective than salaries offered to technical people, whose skills are more quantifiable in conventional terms.

Another surprise is that while artists are widely assumed to earn less overall than their counterparts on the programming side of the fence, artists in some categories are actually commanding higher salaries, most notably at the entry level.

“Salaries are subject to the laws of supply and demand, and most people seem to be mature enough to understand this and don’t let it become an interpersonal issue.”

— animator, Washington

**STAYING COMPETITIVE.**

Just as programmers must work to remain on the competitive edge of technology, so must artists continue to adapt and evolve with changing technology in game development. For the same reason that programmers stopped doing art when we exited the 8-bit era, the creative demands on professional artists will continue to mount as polygon counts, fill rates, and available texture passes increase steadily with every generation of hardware that hits the street. Demand will no doubt accelerate for artists who keep up with the latest software and technologies. For an art director awash in demo reels, artists who can demonstrably manipulate subdivision surface patches, massage intricate facial-cap data, write time- and labor-saving scripts for a 3D art package, help construct an effective art path, and communicate productively with their programming, production, and design teams will no doubt be rewarded for their expertise.

There is also growing demand for art techs. Currently, this position often falls to whichever programmer on a team has the strongest grasp of art software, or whichever artist has an unusual proclivity for understanding and applying technology. It is a unique and increasingly critical combination of skills, one for which experienced art techs can expect to be compensated well in the years to come, whether they come from the programming or art side.
DESIGN

For the purposes of this survey, we considered a “designer” to be a game designer, a level designer, or a writer.

In smaller companies, one person might fulfill such a role, whereas larger projects or companies might have different people assigned to these specialized tasks. A lead designer or creative director is someone in charge of coming up with overall gameplay concepts and overseeing the design process, writing and maintaining design documents, and managing a design team to implement their creative vision. For designers, experience is an important factor in commanding higher salaries, especially for designers with six or more years’ experience.

“I was definitely surprised at how little money I was offered as a starting salary. Luckily I stuck it out, and my salary grew at a substantial rate.”
— lead designer, Wisconsin

PRODUCTION

Forever fighting off the image of the coffee-cup-toting clipboard-wielder who leaves work right at the stroke of five, producers have some of the most eclectic job responsibilities in game development.

For the purposes of our survey, we considered a “producer” to be anyone who described themselves as a producer, associate producer, or project lead/manager. These people have a range of functions: planning and managing the QA process, setting up motion capture shoots, communicating with the publisher, managing the overall flow of game assets, planning localization, managing the overall project schedule, and essentially doing anything else that will help ensure the game is completed on time. People who describe their jobs as executive producers typically have more production experience, or might oversee more than one product or producer at a time. Often they have come up through the ranks with steadily increasing responsibility.
For a huge percentage of the game industry, the quality assurance department is the training ground. Engineers who are self-taught often come through QA; designers and producers almost always come from that environment. They start in customer service and work into QA, and then have a choice of going into development or marketing. If they choose the development path, they usually choose either design or production.

In the old days, game design almost always came from the programmers, who taught themselves to program by trial-and-error while pursuing their idea. These days, though, many designers come from QA or customer service, where they have to find bugs and work with the developers to fix them. This process, and not recreational programming, brings them into the process of design, and development in general. Producers typically grow the same way. The QA or customer service person has to work with the producer who is a liaison to the development team. Pretty soon this person is assisting the producer and gradually evolves into a full producer after a few promotions. It’s hard to leave a company while still in QA and find a job as a producer, designer, or programmer elsewhere. The first promotion almost invariably must come from within the company. — Jill Zinner

Audio salaries per years of experience

<table>
<thead>
<tr>
<th>Years</th>
<th>1-2</th>
<th>3-5</th>
<th>6+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>$44,430</td>
<td>$68,200</td>
<td>$57,689</td>
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</table>

Audio salaries per years of experience by gender

<table>
<thead>
<tr>
<th>Years</th>
<th>1-2</th>
<th>3-5</th>
<th>6+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>39.2% male</td>
<td>45.1% male</td>
<td>96.1% male</td>
</tr>
<tr>
<td>Age</td>
<td>15.7%</td>
<td>3.9%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Avg. Salary</td>
<td>$52,500</td>
<td>$57,689</td>
<td>$57,689</td>
</tr>
</tbody>
</table>

I started working in the game industry 14 years ago. There was no money back then, we were just kids who were doing it for fun. So I guess having any salary is an improvement over those days.” — sound director, California

The QA Breeding Ground

For a huge percentage of the game industry, the quality assurance department is the training ground. Engineers who are self-taught often come through QA; designers and producers almost always come from that environment. They start in customer service and work into QA, and then have a choice of going into development or marketing. If they choose the development path, they usually choose either design or production.

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OTHER TRENDS

The laws of supply and demand prevail in game development salaries. Higher salaries generally go to those who require more specialized skills and hence are harder to hire for, such as programmers, than in areas where supply exceeds demand, such as in art and design positions. However, the disparity in pay is not as gaping as those looking from one side of the fence to the other might have suspected — only 6.9 percent difference overall between programmers and artists of all levels of responsibility and years of experience, and 8.1 percent between programmers and designers.

Realities of supply and demand also help fuel differences in regional game development salary averages. For example, Northern California, which hosts a booming high-tech industry with a chronic shortage of skilled technical workers, offers higher salaries than regions where the competition for available qualified talent is not as stiff.

Only 6.0 percent of our survey’s respondents were women, and their salaries were 0.7 percent lower overall than their male counterparts (or 99.3 cents on the dollar). This disparity is far better than women fare in the national average of just 76.5 cents on the dollar compared to men in 1999, as reported by the Census Bureau and the Bureau of Labor Statistics, an arm of the U.S. Department of Labor.

Who makes what and why is just as controversial in game development as it is in other industries. Indifferent economic principles are at work alongside human desires for equity and fair recognition for one’s contributions. For many game developers who couldn’t imagine doing anything else for a living, however, compensation is just icing on the cake.

## Average salaries by discipline

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming</td>
<td>$62,848</td>
</tr>
<tr>
<td>Art</td>
<td>$58,458</td>
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<tr>
<td>Design</td>
<td>$57,714</td>
</tr>
<tr>
<td>Production</td>
<td>$56,227</td>
</tr>
<tr>
<td>Audio</td>
<td>$55,926</td>
</tr>
</tbody>
</table>

## Salary comparison between 1st & 3rd party studios

<table>
<thead>
<tr>
<th>Disciplines</th>
<th>1st Party</th>
<th>3rd Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming</td>
<td>$60,071</td>
<td>$57,485</td>
</tr>
<tr>
<td>Art</td>
<td>$59,196</td>
<td>$57,714</td>
</tr>
<tr>
<td>Design</td>
<td>$59,685</td>
<td>$60,415</td>
</tr>
<tr>
<td>Production</td>
<td>$60,815</td>
<td>$60,071</td>
</tr>
<tr>
<td>Audio</td>
<td>$61,448</td>
<td>$60,975</td>
</tr>
</tbody>
</table>

## Across all game industry

- **6.0% female, $61,014 avg. salary**
- **19.2% 6+ yrs**
- **39.5% 1–2 yrs**
- **41.3% 3–5 yrs**
- **94.0% male, $61,448 avg. salary**
- **$62,828 West**
- **$59,685 Midwest**
- **$53,227 South**
- **$54,222 Texas**
- **$69,260 N. California**
- **$55,206 S. California**

SHOULD I STAY OR SHOULD I GO?

Development teams for market-relevant games can require anywhere from six to 35 people. Many senior people have reached the ceiling salary for their position. New technology is eliminating some positions, changing others, and creating new needs. Experienced developers are now finding that they have to make some serious decisions about their career. They might consider taking less money or relocating to a different part of the country where the cost of living is more reasonable.

New studios are starting up everywhere, and so jobs are cropping up all over the country. These small studios work for the big publishers. The publishers are trying to cut the cost of making their products, so they look to outside developers to make the cost of making a game more reasonable. The general trend of our industry today is the migration of all the great talent out into these new studios. Generally, game developers change jobs about every two years or at the end of a game cycle. Terrific programmers, sometimes whole teams, get disillusioned with the companies where they work and strike out to do it on their own. What entices people to make such a career shift? One factor is that the cost of living is so different all around the country. People who want to buy a house or raise a family are looking for jobs at game companies where the cost of living is lower and the pace is slower. Also, many of these outlying studios are trying to get back to the basics of making games, fostering a culture which seems attractive to many developers coming from large, corporate environments. — Jill Zinner