

Financial Ratings Series

**WeissRatings**  
& Grey House Publishing

Financial Literacy: Planning for the Future

# Starting a Career & Career Advancement

2019/20



GREY HOUSE PUBLISHING



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# Welcome!

Grey House Publishing and Weiss Ratings are proud to announce the second edition of ***Financial Literacy: Planning for the Future***. Each volume in this series provides readers with easy-to-understand guidance on how to manage their finances. This eight-volume set provides helpful guidance to readers who are ready for the next step in their financial planning—starting a family, buying a home, weighing insurance options, protecting themselves from identify theft, planning for college and so much more. Designed as a complement to ***Financial Literacy Basics***, ***Financial Literacy: Planning for the Future*** takes readers even further towards their financial goals.

Written in easy-to-understand language, these guides take the guesswork out of financial planning. Each guide is devoted to a specific topic relevant to making big decisions with significant financial impact. Combined, these eight guides provide readers with helpful information on how to best manage their money and plan for their future and their family's future. Readers will find helpful guidance on:

- Financial Planning for **Living Together, Getting Married & Starting a Family**
- **Buying a Home**
- **Insurance Strategies & Estate Planning** to Protect Your Family
- Making the Right **Healthcare Coverage** Choices
- Protect Yourself from **Identify Theft & Other Scams**
- **Starting a Career & Career Advancement**
- **Saving for Your Child's Education**
- **Retirement Planning Strategies** & the Importance of Starting Early

Filled with valuable information alongside helpful worksheets and planners, these volumes are designed to point you in the right direction toward a solid financial future, and give you helpful guidance along the way.



# Planning for the Future: Steps for Career Advancement



## Choosing to Choose

Some people knew what they wanted to be when they grew

up right from the very beginning and followed that career path throughout their life. For most of us, on the other hand, answering that question is not as easy.

There are many choices to consider when selecting a career path. A good starting point might be to ask yourself some questions.

- What am I interested in?
- What am I good at?
- What am I passionate about?
- What does it mean to be successful?

Work takes up about half of our waking lives, and, for better or worse, our jobs give us a social identity. Good career planning means being able to look with clear sight at your current situation and being able to envision your career in the future.

That career future is your choice and you have the ultimate freedom to make decisions about your potential career path based on your passions, interests and your skill set. In other words, you can choose to choose. Of course, there are seemingly innumerable hard limitations of circumstance that make up the field of our possible actions, but the more we feel like we are agents in our lives and agents of our futures, the more happiness we will have.

You may be already established on a career path, considering a new career, or just starting out. This guide is intended to give practical ideas that will be meaningful in each of these cases.





## Evaluating Your Career Path

In evaluating your career path, you might want to think in terms of the long-term and the short. Your long-range vision, what you're shooting *for*, isn't necessarily what you're shooting at today. Let your long-range thinking be shaped by as much *self-knowledge* as you have available.

For many, having a job with a purpose or mission matters more than making a lot of money. This can happen at the beginning of your career, or it can change over time. Usually, when that happens, the change is a good one that results in a more rewarding possibility.

Every career path has twists, turns and forks in the road. You might have come out of law school planning to be a high-powered corporate attorney who will retire at fifty and travel the world. Then, in your thirties, you found that you derive purpose from helping the poor and the disadvantaged. Do you take the leap and the pay-cut and go to work for the nonprofit now?

Many women and sometimes men choose to modify their career course dramatically by taking time off to raise their children or to follow other dreams. These are hard choices, with salary implications for years to come. But, with deep personal reflection on what matters most and what path will bring about the most personal satisfaction and happiness, making the hard choice can ultimately be the right one.

## Career and Personality Tests

If you are re-evaluating your current job trajectory or thinking about a new career, there are a variety of career suitability and personality tests available for you to take, either online or from career counseling services and career coaches. Even if you think you don't need these tools, they can't hurt. The Myers-Briggs Personality Test, in particular, has had a good run in a number of settings, including online dating as well as human resources.

Often, however, we rely on tests like these to be external validators for things that we already know. "Look! I'm an introvert! This quiz says so." Certainly these tools can be helpful when you are mulling over ideas, but ultimately the surest route to self-knowledge isn't to ask around!



Once you've done the deep thinking part, the rest is mere technique. It goes without saying that you need to understand the *ladder* in your chosen field. In the nursing field, for instance, a candidate might begin their career as a Certified Nurse Assistant, move on to become a Licensed Practical Nurse, and ultimately reach the level of Registered Nurse. Climbing the ladder might involve a series of accreditations, developing skills and earning promotions, or other means of adding job responsibility. These things vary by field, but the ladder can be your initial structuring tool for planning advancement in your career.

There has been a push towards younger and younger accomplishment in the last decade or so. Think of high school students founding nonprofits as one example. As a result of this trend, many professional programs have skewed younger and younger. Imagine the whiz kid who finishes a PhD in clinical psychology and obtains

a professional license to practice at the age of twenty-five. He's done everything right – no, he's done everything more right, better than his peers – but he can't find clients to support a private practice because, of course, he's only twenty-five years old. It happens.

Thus, it is important to be realistic and have a realistic plan for advancement. This can be difficult for some if they are accustomed to easy advancement or believe that workplace trends in one industry, like the youth and disruption favored in information technology, are the trends everywhere.

They are not, and most fields and industries have long-established and regimented pathways for advancement. Being a "go-getter" shows your bosses that you want to move up the ladder, but a balance should be struck, and, often, a line maintained.

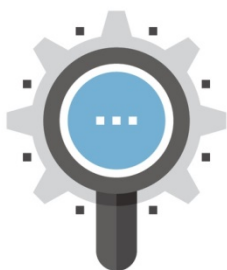
## Lessons from the Legacy Project

*The Legacy Project was founded in 2004 by Karl Pillemer, a professor of human development at Cornell University. The project is simple in design but profound in its implications. He sent out a survey to collect responses from Americans over the age of seventy, hoping to discover their collective wisdom. The one question he asked them is this: "What are the most important lessons you have learned over the course of your life?" When it came to the matter of careers, the almost unanimous reply was, "Try to be involved in what you love for your work." Of the one thousand people that Dr. Pillemer interviewed, not one of them said, "Try to make a lot of money in order to fund doing what you really love when you're not at work."*

*You can learn more about the Legacy Project at <http://legacyproject.human.cornell.edu/>.*







## Where to Look for Jobs

Experts say that if you are job hunting your first step should be

telling your network that you are looking. Let your friends, family members, current and former coworkers, classmates, and your social network know that you are job hunting. You'd be surprised how many connections you might make just by spreading the word.

Sometimes, getting introduced to a company through your network can open doors and give you a leg up from other candidates. Ask your network if their company is hiring, or if they have a connection to a company that might be a good fit for you.

Research companies that you think would be a good fit for your career goals. It can't hurt to send your resume to companies that don't have a posted job opening right now. You might catch them just as they were about to post an opening or get ready to expand.



## Job Search Engines & Job Boards

There are hundreds of job search engines and job boards online these days. Most sites will allow you to enter specific search criteria, like job type, location and specific keywords to help you narrow your search and quickly find available jobs that match your criteria. Some will even let you fill out a questionnaire and alert you to openings that match your profile.

According to [thebalancecareers.com](https://www.thebalancecareers.com), the ten best<sup>1</sup> are:

1. Indeed.com
2. CareerBuilder.com
3. Dice.com
4. Glassdoor.com
5. Jobs.google.com
6. Idealist.com
7. LinkedIn.com
8. LinkUp.com
9. Monster.com
10. US.jobs

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<sup>1</sup> <https://www.thebalancecareers.com/top-best-job-websites-2064080>





## Job Centers

You can also visit your local job center. Staff at these centers will help you search for jobs, find training and answer additional employment related questions. You can find a job center in your area at [CareerOneStop.org](http://CareerOneStop.org).



## The Library

Your local public library is another source to consult. They will have information on how to find jobs and information on potential careers. They might even offer resume help and classes to build your skill set. Some libraries also offer job seeking assistance and counseling too.



## How to Write a Resume That Stand Outs

Employers often review hundreds of resumes and applications for a single job posting. The time that you spend polishing your resume is time well spent.

- **Design is important.** You want your resume to stand apart from others in the pile. A simple, clean and modern design is best. You can download a template online, or use a prebuilt template in your word processing software to get started. Use a font size of 10-12 to make it easy to read.
- **Put the good stuff at the top.** If an employer scans the top of your resume, you want the important information to be there where they can see it quickly. A summary statement that outlines why you are a good choice for the job is important. Keep your contact information at the top of the page brief, so you can devote more space for important achievements.
- **Words Matter.** Take the time to update your resume each time you send it to an employer. Update the





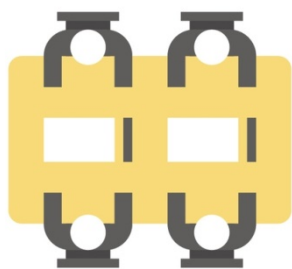
summary statement so that it applies to the job you are applying for. Include key words from the job posting in your resume, if they apply to your previous experience. Some larger employers use a tracking system that scans for keywords and highlights candidates that best match what they're looking for. If those keywords are not in your resume, your application might get skipped.

- **Focus on Skills.** Your resume should showcase the skills you have developed over the course of your career. Put your most advanced skills at the top of the list and work backward.
- **Highlight Your Successes.** Instead of listing your previous job responsibilities, highlight your successes instead. Awards and honors should be noted as well. Include statistics, if you can, like percentage increases in sales or percentage decrease in costs.
- **One or two pages max.** Most resumes should be confined to a single page, or two pages if you have been in your career for more than 10 years. You want to highlight your best accomplishments and abilities, but keep it short so your potential employer can learn

about you without having to scan through a long document.

- **Make sure it looks good on the screen and on paper.** Do a test print to make sure everything prints correctly. Your resume should be readable on multiple screens and on different types of computers. Sending your resume as a PDF file is a good choice.
- **Create a customized cover letter.** When you send your resume, include a cover letter that has been customized for the job you are applying for. The cover letter gives you another opportunity to say why you would be an excellent candidate for their job opening.
- **Take the time to proofread.** There is no room for typos on your resume. Read it carefully for spelling errors and punctuation. Have a family member or friend read it too, and give you their feedback.
- **Use a professional email address.** Some employers will not seriously consider a candidate with a silly or inappropriate email address. A good rule of thumb is to use your name as your email address.
- **Above all, be honest.**





## Getting Ready for Your Interview

Here are a few tips from the experts on how to prepare for and conduct a solid job interview:

- **Review the job description.** Make a list of qualities or skills that are mentioned in the job posting and take notes on how your experience fits those qualifications.
- **Research the company.** Take a look at the company's website. Read some of its recent press releases. Read some of the company's reviews. Taking the time to research the company will help prepare to answer potential questions. Make a list of any questions you might want to ask the interviewer.
- **Practice.** It can help to practice an in-person interview or a phone interview with a friend or family member beforehand.
- **Your social media can help or hurt you.** According to a recent CareerBuilder survey, "seven in ten employers (70 percent) use social networking sites to research job candidates during hiring process. Nearly half of employers (48 percent) check up on current employees on social media. A third of employers (34 percent) have reprimanded or fired an employee based on content found online."<sup>2</sup> Consider that a potential employer might review your recent social media posts before inviting you for an interview. Social media can be a good way to highlight recent accomplishments. It can also be a good way to network with professionals in your industry and search for additional job opportunities.
- **Dress accordingly.** First impressions do matter, so business attire is a safe bet. You want to project a professional, well-groomed appearance.
- **What to bring.** Bring extra copies of your resume, your list of prepared questions, a notepad or binder and a pen, along with a printed copy of your business references. If it is appropriate for the position, bring a portfolio of samples of your previous work.

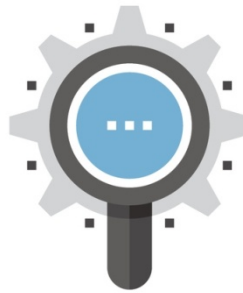
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<sup>2</sup> CareerBuilder. More Than Half of Employers Have Found Content on Social Media That Caused Them NOT to Hire a Candidate, According to Recent CareerBuilder Survey.  
<https://www.businessnewsdaily.com/2377-social-media-hiring.html>



- **What not to bring.** Don't bring your cellphone, or at the very least, turn it off so it does not ring or buzz in your pocket or purse.
- **While you wait,** be professional and courteous to the attendant and all staff you meet. Project confidence in the waiting room.
- **During the interview,** listen carefully and answer the interviewer's questions in a way that highlight your skills and qualifications. This is where your practice sessions can pay off. At the end of the interview, if you are interested in the job, let the interviewer know why you would be an excellent fit.
- **Do you have any questions?** This is a common question during the interview process. It's a good idea to have some questions in mind. It shows that you've done your homework and have come prepared.
- **Don't forget the thank you note!** Collect business cards from everyone you meet with and use this information to follow up. Use the after-interview thank you note to thank the interviewer for their

time, express your interest in the job, and highlight how you would be the best candidate for this position.



## Evaluating Potential Employers

You've taken the bull by the horns and decided that it's time to find a new job. Your future employer will spend a lot of time and effort evaluating you. **And you should spend *even more* time and effort evaluating them.** Often, learning about an employer can take a bit of detective work. You find clues, you read the tea leaves. Use the interview to ask questions, of course, but also try to get a sense of your employer's management style and motivation. Is the interviewer trying too hard to sell the company or the position to you? Does he or she seem to be speaking from a script, using slogans, and avoiding the particulars? These can be signs that they might be looking for just another warm body.

Cyber-sleuthing is a natural place to turn. Glassdoor is a website where current and past employees can post anonymous reviews. Remember, though, as with any online review site, that the disgruntled folk are always



apt to write more – and more colorfully – than the rest. You can also turn to apps like Twitter, Instagram, and Pinterest. For example, if current employees are posting pictures of happy hour at 5 p.m. with the gang from the office, you will have a good idea of both the work hours *and* the level of camaraderie.

Increasingly, people are using tools like Facebook or LinkedIn to strike up conversations with existing employees of a company and asking honest, legitimate questions about the workplace culture. If it seems like nobody is talking, or, worse, they've been instructed not to talk, then that's a clear sign that something is amiss.

#### Questions to keep in mind when evaluating an employer:

- Will the job allow you to build on your strengths and develop in the direction that you want?
- What is the management style at the company and, especially, in your department or division? Does management seek out input from employees?
- Will you have enough support – staff and time, for example – to accomplish your projects, or does it seem as though there is a pattern of unrealistic expectations and subsequent jams? Some companies, and some individuals, thrive on

states of emergency and some don't.

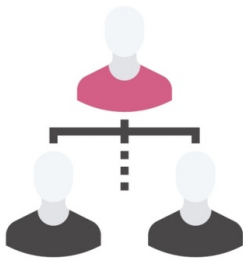
- How soon will you be able to contribute in a way that is meaningful to *you* to the company's success? Remember that if the company makes widgets and you really want to make fidgets, then realistically you may never feel in sync with the company's mission.
- What is the turnover rate? A relatively high attrition – say, every two years – isn't necessarily a bad thing if, for example, *your* plan is to learn what you can in about that time and move on. Use your judgment.
- How is the company doing financially? Layoffs in the recent past or planned for the near future is a bad sign. You should also get a sense, if you can, of the company's prospects five or ten years down the road.
- What is the work atmosphere and culture like? Is team building important or do individual employees have their own set of goals?
- Other things to think about are more mundane but no less important. For example, the commute, any travel that might





be expected, or the new city that you might have to move to.

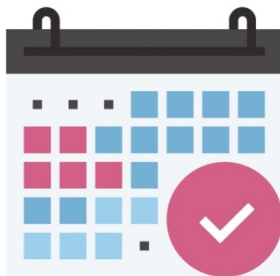
- You should also learn what you can about work hours, which can vary not just from industry to industry but from company to company. Are they acceptable to you?



## Advancement: Promotions

Whether you've just started at a new company or you've

been in the same job for years, you should be prepared to put some thought into a realistic assessment of your opportunities for advancement in your job, whether through promotion or getting a raise.



## Have a Promotion Plan

Promotions are not inevitable or a matter of course.

Never missing a day of work and being diligent in your assigned tasks – and nothing more – are a reasonably sure way to be passed over. If you are interested in a promotion, you need

to signal as much and, of course, you need to cultivate strategies for getting promoted.

There is more flexibility in work today than in the past; it's not unusual to change jobs more frequently, to make lateral moves, or to work for a while in the "gig" economy, a growing trend where companies hire independent workers for short term jobs. The individual is, in certain ways, like an entrepreneur managing his or her livelihood and marketing his or her skills and talents in the employment marketplace. From this vantage, developing a promotion plan is just a good business strategy for your career.

Here are some tips that many experts agree to be part of a sound promotion plan:

1. **Know what you want.** You can't strategize effectively when you don't have a goal. If you appear to be vying indiscriminately for two or three different positions, you will probably hurt your chances of getting any one of them. Ambition is one thing, but you need to have a direction and demonstrate your commitment to it.
2. **Make your boss an ally.** If you want a promotion internal to your division or department, then you definitely need your boss to support you. There are



innumerable ways to signal your interest, but performance review meetings are an obvious occasion that can be leveraged. Let your boss know that you are interested in higher-level concerns, beyond your day-to-day tasks, and find ways to insinuate that you are capable of tackling them smartly and effectively.

3. **Some degree of self-promotion may be necessary**, but if you demonstrate that you are able to share the glory – put your team-mates' names on the report, take a moment to speak well of your co-workers in meetings – you are demonstrating the kind of ease and magnanimity that mark you out as a good leader.
4. **Take advantage of professional development opportunities.** These may be relevant college courses, or a system of formal continuing education classes unique to your field. Many careers in IT and other technological fields have plentiful opportunities for credentialing, training, and acquiring certificates. But don't neglect, by any means, the less formal opportunities. In Washington DC, for example, there are plenty of "brown bag" lunch events and lunch-

time lecture series for people with jobs in public policy, international relations, and other fields prominently represented in the nation's capital. Find them out, make a habit of going, and your colleagues – and others – will soon be aware of your activities.

5. **Be interested in your field, not just in your job.** Read the industry magazines, learn what other companies are doing, and know what the trends are. There might not be a brown bag event series in your city or region, but you could consider starting one for yourself and other professionals in your field. These occasions are also a good way to network with others in your field or industry.
6. **Act professionally at all times in the workplace.** Be dependable and responsible. Arrive on time. Don't be the one watching the clock at meetings or just before quitting time. Dress and groom professionally. Be a problem-solver. Be a team-player.
7. **Behave and dress in a manner appropriate to the position that you want.** The easier it is to visualize you in that position, the easier it will be for your



boss to promote you or to recommend the promotion.

8. **Don't make yourself indispensable.** This might seem counterintuitive, but if you're the only one who can do your job, why would your boss ever consider moving you to another position? Learn to go out on a limb: groom someone to take your place, and have that person waiting in the wings. One of the reasons that companies often hire from the outside rather than promote from within is that when they promote from within, the internal shuffle caused is disruptive. Try to make it easier for the company to promote you.

9. **Insert yourself.** The classic movie, *All About Eve* is about Eve Harrington, a shy, sweet ingénue who just "happens" to fall into the circle of a great theater actress and then just "happens" to have memorized all of the lines to the leading role when that great actress falls ill. You don't want to be schemer like Eve Harrington. But there might be an opportunity to insert yourself in good faith, if you pay attention. Offer to help your boss with a project that he or she is working on. You might just earn

yourself a place at the table in some meetings you wouldn't otherwise have been invited to.

10. **Find new opportunities.** If your company hired you to sell office equipment like the rest of the sales division, suggest that you could develop new business for them selling office furniture. Write a proposal; ask for a meeting. In the best-case scenario, this could turn into a new position in the company or even a new division – one that you created. It's true! No matter what industry you're working in, this kind of creative thinking and initiative will be valued.



## Asking for a Raise

Annual salary increases are the norm, and you might also get regular or occasional bonuses or profit-sharing checks. But if you want a bump in salary outside of those mechanisms, you'll have to ask for it.

Asking for a raise can be one of the most dreaded and awkward things that you will ever do in your career. But it doesn't have to be. Go in clear-eyed, and don't let it get personal. Think that you are, in a real sense, not





just an employee but an entrepreneur tending *your* business. And just as you would never set out on a new business venture without a good business plan, you shouldn't set about asking for a raise without a serious plan, either.

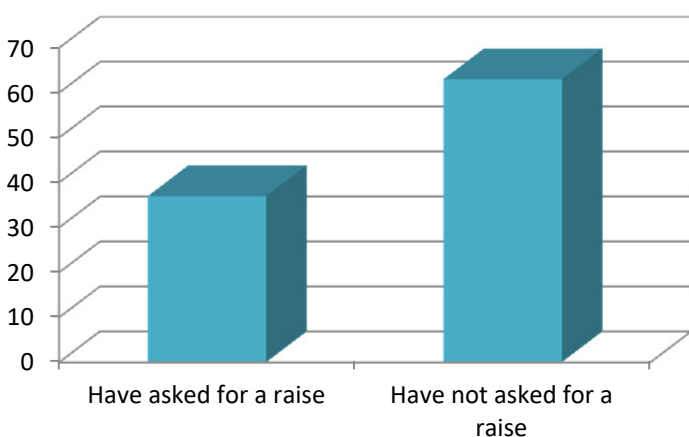
First, you should understand the mechanisms for salary increases in your company. If it's standard to offer increases regularly, once a year, and tied to a performance review, then it isn't likely that you'll be successful trying to negotiate a raise outside of that mechanism. If this is the case, be sure to use those mechanisms to your advantage.

If, on the other hand, you think that there might be more fluidity with regards to timing, think carefully about your approach. Maybe you just wrapped up an important project – with a bow on top – and now you're

lined up for another; maybe you just accrued an honor in your field or spoke at your town's high school or at a professional association convention. Those are ticks in the "good timing" column.

If there are any signs of belt-tightening in your company or if your boss is under the gun this quarter about the department's budget, then obviously you should hold back. To be even more fine-grained, you should time the conversation carefully, too. Is your boss frazzled this week, sleeping on the office sofa? Be smart.

The process can vary significantly from field to field. Be aware that in most corporate environments, unless you work directly under the owner or CEO, your boss or manager will have to get approval from his or her boss, and you'll need to supply him or her with the ammunition needed to make



■ Only 37% of workers surveyed have asked for a raise from their current employer.

Data from PayScale  
(<https://www.payscale.com/data/how-to-ask-for-a-raise>)



the case on your behalf. Be mindful of your timing and the circumstances for this, too.



## Tips for Asking for a Raise

### 1. Research pay rates for your field.

This can be tricky; pay can vary by region, city, sub-

sector, and level of experience. But you can get a very good idea with research, especially if you take all of those factors into account. Be prepared, if need be, to gently educate your employer, especially if they've been on autopilot for a number of years. Remember that credentials, degrees, and other educational achievements are significant factors, too. Understand the trends affecting pay in your field and in the economy at large. When unemployment is low, for example, the employee is at an advantage.

2. **Have a figure.** One 2015 study showed that men and women who went into negotiations for a raise without a figure were offered 32% less than those who asked for a specific amount. Most merit-based

raises are 3% to 5%. This can be a good rule of thumb, but, like everything, the amount is negotiable.

3. **Be realistic.** Maybe you just *know* that you deserve another \$4,000 a year, but if you're already paid well for people with your experience in your job and in your region or city, then you're going to have to prove your greater value with something extraordinary.
4. **Grease the wheels of your raise machine and set it in motion early.** Don't hide in the corner secretly putting together all of your reasons for asking for more money, intending to spring it on your employer. Being both open and forthright as a matter of course will generally serve you well. Maintain an open and a collegial relationship with your boss, if you can. A lot of interpersonal communication – maybe most – goes on indirectly as well as informally. Don't be pushy or unprofessional, but if you have a history of accomplishment, there might be informal opportunities to remind your boss well in advance of when you ask for a raise. There might be informal and indirect communications *from* your



boss, too, that will help you know where you stand before deciding whether or not to proceed.

5. **Make a record of your achievements.** When you prepare for the conversation with your boss, you should be ready to back up your request for higher compensation with concrete reasons. Sales numbers or other quantified results are good. You might also have emails from important clients or from colleagues in your field praising your accomplishments and ability.

You should be prepared to enumerate or even show these to your boss.

6. **Show that you can look *forward*.** You will do yourself a big favor if can demonstrate that you understand the company's needs going ahead. You can prepare for this by studying general trends in your industry, of course, but even better by asking around in your company, or by simply keeping your ears peeled. Prove to your boss that you'll be worth the extra money in the future.

## Where to Look for Information

**Professional associations** that are worth their salt report on salary trends and other relevant trends, too. Look in their publications, and if you don't see what you need, contact them.

**The Bureau of Labor Statistics** maintains an up-to-date publication on the web called the *Occupational Outlook Handbook*. In their own words, the handbook gives "career information on duties, education and training, pay, and outlook for hundreds of occupations." You can access the handbook at <https://www.bls.gov/ooh/>.

An often-overlooked source for information is ***your public library***. Reference librarians are, more often than not, unselfish, curious, and itching for you to come in with a good question that they can help you research. You might know that you can turn to Glassdoor.com, Salary.com, Simplyhired.com, and other websites to find information about salaries in your field. But your local librarian doesn't have a master's degree for nothing and will likely know how to find information in more obscure sources, including official records and government publications, even state and local ones.



7. **Consider the outcomes and be prepared for “no.”** Sometimes you will be so convinced of the rightness of your raise that you forget to have an exit strategy. Your boss might come back with any number of responses, including a lower amount than you asked for or an outright no. Your boss might offer you other forms of compensation or rewards. You might think you’ll cross that bridge when you get to it, but if you consider well in advance the possible outcomes, then you will have a clearer sense not only of your future options but of your real needs: what might you settle for and for how long? What is

non-negotiable? If you don’t get the raise that you want, you can ask your boss what you can do to increase your chances of getting what you want the next time around and when that time might be – likely, at your next performance evaluation.

8. **Consider what not to do.** Threatening to quit won’t do you any favors. Even if, after careful consideration, that *is* the next step in your plan (should you not get the raise that you feel you deserve), keep it to yourself. By the same token, some experts recommend not mentioning your household expenses when you ask for a

## The Gender Pay Gap

According to a 2019 survey by PayScale, “the uncontrolled gender pay gap, which takes the ratio of median earnings of all women to all men, decreased by \$0.05 since 2015. However, women still make only \$0.79 for every dollar men make in 2019.

What often gets lost in translation is what the uncontrolled wage gap truly represents — that women are less likely to hold high-level, high-paying jobs than men. There are structural barriers which keep women from advancing in the workplace— this is what we call the opportunity gap.

The controlled gender pay gap, which controls for a number of factors such as job title, years of experience, industry and location so that the only differentiation between workers is their gender, shrunk by just \$0.008 since 2015. Women now make \$0.98 for every dollar an equivalent man makes.”

<sup>1</sup> <https://www.payscale.com/data/gender-pay-gap>





raise – the kid’s tuition or your outlandish rent increase. This shouldn’t be a hard and fast rule, however. If your salary is, in fact, below the norm in your field, then there is no good reason that your boss couldn’t be gently reminded of that imbalance. But, as always, use your judgment.



## Evaluating Compensation Packages

It’s easy to think of compensation

only in terms of your salary, but if you’re considering a job offer or a promotion, it’s important to look closely at the total package. Similarly, if you ask for a raise, your boss might come back to you with a counter-offer involving perks or benefits. It might be hard to say what an office with a window is worth; on the other hand, a formal benefits package (retirement, healthcare, etc.) can add up to as much as thirty percent of your salary.

Also, many so-called lifestyle factors and perks *can* be translated into dollars. Is the company dress code casual or will it be business suits all the way? Is lunch regularly catered, like at some information technology startups? These factors mean money. Make an analysis of the benefits and

perks when comparing job offers, and you might be surprised.

The most representative and financially significant components of your benefits package are probably your retirement plan and your health insurance plan. Your benefits also include such everyday elements as holiday and vacation pay and any overtime arrangements. Other common benefits are bonuses, day-care services, tuition reimbursement, and so on.



## Health Insurance

In 2018, the Bureau of Labor Statistics reported that

72% of workers in the civilian sector have healthcare benefits available to them from their employers. This is as high 95% for management and union workers. Unsurprisingly, the employment category with the lowest rates of healthcare benefits is the service sector, where only 48% of employees have access to these benefits from their employers.<sup>3</sup> In 2018, the average annual cost of a health insurance plan for a single individual was \$6,896 and the cost for

<sup>3</sup> <https://www.bls.gov/ncs/ebs/benefits/2018/ownership/civilian/table09a.pdf>



a family was \$19,616.<sup>4</sup> Obviously, the more of that paid for by your employer, the better off you will be.

When you're looking at the medical and dental coverage from your employer, ask for details if the information wasn't given to you already. Find out what's covered and what isn't (Vision care? Dental?), find out what your deductible will be, and find out what portion you will have to pay. Rare is the employer who pays 100% of the premium.

Health insurance is changing rapidly; costs to consumers have risen nearly twenty percent annually in recently years. Nevertheless, it might be helpful to know that, in 2018, the average contribution from employees was 18% of the total premium for singles and 29% when there was family coverage. That translates into \$103 monthly for individual coverage and \$474 for family coverage.<sup>5</sup>



## Retirement Plans

Some companies still offer their employees **defined benefit plans**, or traditional pension packages. If this is what your employer offers, go for it. It's the most costly style of retirement plan to maintain and the most complex to run, but its virtues for the *employee* are manifold: primarily a fixed and predictable retirement benefit and the possibility of rapid accrual. Today, only 19% of all workers have access to a defined benefit plan<sup>6</sup>.

Much more common are **defined contribution plans**, like 401(K) s and Individual Retirement Accounts (IRA). It's important to know how much your employer will contribute to your retirement fund. In 2019, employer matches have reached 4.7 percent of employee salaries, the highest ever reported, according to a recent survey by Fidelity<sup>7</sup>.

<sup>4</sup> Kaiser Family Foundation, *2018 Employer Health Benefits Survey*. <https://www.kff.org/health-costs/report/2018-employer-health-benefits-survey/>

<sup>5</sup> Kaiser Family Foundation, *2018 Employer Health Benefits Survey: Section 6*. <https://www.kff.org/health-costs/report/2018-employer-health-benefits-survey/>

<sup>6</sup> <https://www.bls.gov/opub/ted/2018/51-percent-of-private-industry-workers-had-access-to-only-defined-contribution-retirement-plans-march-2018.htm>

<sup>7</sup> <https://www.cnbc.com/2019/06/10/this-is-the-average-401k-employer-match.html>



Many employers will match 100% of your contributions up to a dollar amount or up to a percentage of your salary. For example, they might match 100% up to a maximum of 3% of your annual salary. That means if you contribute \$50 to your retirement plan each week, your employer will contribute \$50 dollars too.



## Bonuses

Sometimes companies will offer a sign-on bonus or pay your moving expenses. Sign-on bonuses vary tremendously by job, when they are offered at all. Typically, however, they are a few thousand dollars, helpful for paying your first and last month's rent, paying the movers, or buying a new wardrobe if you're a recent college graduate.

Often, bonuses are awarded annually and are based upon performance or a percentage of the department's revenue or sales. In some industries, a higher executive's income might be tied strongly to company or department performance and consist largely of bonuses and stock options.



## Profit Sharing

Some companies have profit-sharing plans. A portion of the annual profits will be set aside for distribution to employees, either in the form of stocks and bonds or as a check in the mail. Generally, the formula for a profit-sharing plan divides the proceeds unequally: a greater percentage of a CEO's salary will come in the form of a bonus tied to the company's performance than a low-level employee's. Profit sharing makes sense when a company has been profitable for a number of years and is expected to remain that way. Employee stock ownership plans (ESOP) are a related phenomenon. In an ESOP, employees are remunerated, in part, with stock in the company.







## Making Comparison Charts

When comparing job offers or even a single job offer, you can make a chart and assign dollar values to the benefit components and even to many of the lifestyle factors, like the cost of gas for your commute.

At first glance, Job Offer 1, on the next page, looks more attractive. The salary is higher, and the job is in a swank office building downtown. However, when you carefully compare the benefits and other calculable factors, Job Offer 1 and Job Offer 2 are nearly the same.

### Job Offer 1:

Salary	\$60,000
10 Paid Days Off (two weeks vacation)	\$2,500
Commute (job is an hour away)	(\$3,200)
Dry Cleaning and Wardrobe (business attire required)	(\$2,000)
Health Insurance (your portion)	(1,550)
Retirement (matching contribution)	\$1,400
Estimated Adjusted Compensation	\$57,150

### Job Offer 2:

Salary	\$55,000
15 Paid Days Off (three weeks vacation)	\$3,500
Commute (25 minutes away)	(\$1,500)
Dry Cleaning and Wardrobe (casual attire)	(\$500)
Health Insurance (your portion)	(\$1,100)
Retirement (matching contribution)	\$1,800
Estimated Adjusted Compensation	\$57,200





## The Gig Economy

The gig economy is a relatively new phrase to describe short-term or freelance work. Most often, individuals are hired for a single project or a “gig.” These projects can be as short as an hour’s worth of work, or can last for several months, depending on the project. Whether driving for a ride-share company, freelance graphic design, or working as a short-term personal assistant, these can all be considered gig work. In many cases, these freelance workers are connected to their short-term employers through a website or a mobile app, making it easier than ever to find freelance work.

Some of the benefits of freelance work are setting your own schedule, having ample time for your own priorities, working as much or as little as you want, working from home, and working for several employers at the same time. Many freelancers say that this schedule gives them an optimal work-life balance.

Some of the downsides to freelance work are you don’t have a regular paycheck, you might have a hard time finding work, and there can be long periods of time in between jobs. You’re on your own for healthcare and retirement planning, and you won’t

get paid for sick days or vacation time.

Freelance work can be an excellent way to supplement your regular income. Depending on your skill set, you might have a wide variety of freelance work to choose from.

According to Invoicely.com<sup>8</sup>, these are some of the highest paying freelance jobs today:

1. Web Developer
2. Programmer
3. Internet Marketing
4. Translator
5. Computer Security Specialist
6. Legal Advice
7. Video Editing
8. Writing
9. Voice Actor

Some of the most popular websites designed to connect freelancer workers and employers include:

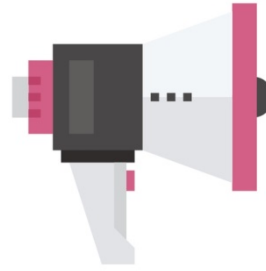
- PeoplePerHour
- Upwork
- Fiverr

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<sup>8</sup> <https://blog.invoicely.com/highest-paying-freelance-jobs/>



- Freelancer.com
- Simply Hired
- iFreelance
- College Recruiter
- Aquent
- The Creative Group
- Croogster
- Crowded
- Toptal
- Guru.com
- DesignCrowd
- Nexxt
- DesignContest



## Beware of Freelance Work Scams

If you are interested in trying out freelance work, be sure to only use legitimate freelance websites. Beware of work-from-home scams. If a job post requires you to pay money to get materials or referrals, it is probably a scam. Beware of pyramid schemes and multi-level marketing scams that want you to sell their product to your friends and neighbors. Avoid suspicious or unusual payment methods. And by all means, don't give out your personal data, such as bank account numbers, your login details or other personally identifying information.





## Last Words

Nobody wants to feel stuck in an entry-level job. You might not want to keep your mid-level job forever, either. It sometimes happens that capable people are simply not interested in management positions, however. If that's you, weigh the pros and cons carefully.

Understanding your career in the context of the rest of your life will tell you whether and when to seek advancement.

Remember, too, that even if you think you've found your optimum habitat in the work ecosphere, there might be a lateral move in the cards. The right move can only ever be the right move for you and nobody else.

Bronnie Ware was a nurse in Australia who worked in palliative care, taking care of the dying in their final days. She wrote a blog in which she recorded her experiences and shared the lucid, insightful thoughts of these men and woman looking back over their lives. The blog attracted so much attention that she eventually wrote a book, *The Top Five Regrets of the Dying*.

The top two regrets, as reported in the *Guardian* newspaper, were these:

*I wish I'd had the courage to live a life true to myself, not the life others expected of me.*

*I wish I hadn't worked so hard.*

Like the elders in Dr. Pillemer's Legacy Project, noted earlier, Bronnie Ware's men and women might have advice that's worth heeding.





# Appendices

Helpful Resources.....	26
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# Helpful Resources

- Bureau of Labor Statistics  
Occupational Outlook Handbook  
<https://www.bls.gov/ooh/>
- United States Department of Labor  
<https://www.dol.gov/>
- United States Department of Labor, Apprenticeship Program  
<https://www.dol.gov/apprenticeship/>
- United States Department of Labor, Career OneStop  
<https://www.careeronestop.org/>





# Occupational Statistics:

Entry-Level Education, On-the-Job Training, Projected Growth Rate,  
2018 Median Pay

Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Accountants and auditors	Bachelor's degree	None	50,000 or more	Faster than average	\$55,000 to \$74,999
Actors	Some college, no degree	Long-term on-the-job training	5,000 to 9,999	Faster than average	n/a
Actuaries	Bachelor's degree	Long-term on-the-job training	5,000 to 9,999	Much faster than average	\$75,000 or more
Adhesive bonding machine operators and tenders	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Administrative law judges, adjudicators, and hearing officers	Doctoral or professional degree	Short-term on-the-job training	0 to 999	Slower than average	\$75,000 or more
Administrative services managers	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$75,000 or more
Adult basic and secondary education and literacy teachers and instructors	Bachelor's degree	None	Declining	Decline	\$35,000 to \$54,999
Advertising and promotions managers	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Advertising sales agents	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Aerospace engineering and operations technicians	Associate's degree	None	0 to 999	As fast as average	\$55,000 to \$74,999
Aerospace engineers	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Agents and business managers of artists, performers, and athletes	Bachelor's degree	None	0 to 999	As fast as average	\$55,000 to \$74,999
Agricultural and food science technicians	Associate's degree	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Agricultural engineers	Bachelor's degree	None	0 to 999	As fast as average	\$75,000 or more
Agricultural equipment operators	No formal educational credential	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$25,000 to \$34,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Agricultural inspectors	Bachelor's degree	Moderate-term on-the-job training	0 to 999	As fast as average	\$35,000 to \$54,999
Agricultural sciences teachers, postsecondary	Doctoral or professional degree	None	0 to 999	As fast as average	\$75,000 or more
Agricultural workers, all other	No formal educational credential	Short-term on-the-job training	0 to 999	Slower than average	\$25,000 to \$34,999
Air traffic controllers	Associate's degree	Long-term on-the-job training	0 to 999	Slower than average	\$75,000 or more
Aircraft cargo handling supervisors	High school diploma or equivalent	None	0 to 999	As fast as average	\$35,000 to \$54,999
Aircraft mechanics and service technicians	Postsecondary nondegree award	None	5,000 to 9,999	As fast as average	\$55,000 to \$74,999
Aircraft structure, surfaces, rigging, and systems assemblers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Airfield operations specialists	High school diploma or equivalent	Long-term on-the-job training	0 to 999	As fast as average	\$35,000 to \$54,999
Airline pilots, copilots, and flight engineers	Bachelor's degree	Moderate-term on-the-job training	1,000 to 4,999	Slower than average	\$75,000 or more
Ambulance drivers and attendants, except emergency medical technicians	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Much faster than average	\$25,000 to \$34,999
Amusement and recreation attendants	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	As fast as average	Less than \$25,000
Anesthesiologists	Doctoral or professional degree	Internship/residency	5,000 to 9,999	Much faster than average	\$75,000 or more
Animal breeders	High school diploma or equivalent	Short-term on-the-job training	0 to 999	Slower than average	\$35,000 to \$54,999
Animal control workers	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Animal scientists	Bachelor's degree	None	0 to 999	As fast as average	\$55,000 to \$74,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Animal trainers	High school diploma or equivalent	Moderate-term on-the-job training	5,000 to 9,999	Faster than average	\$25,000 to \$34,999
Anthropologists and archeologists	Master's degree	None	0 to 999	Slower than average	\$55,000 to \$74,999
Anthropology and archeology teachers, postsecondary	Doctoral or professional degree	None	0 to 999	Faster than average	\$75,000 or more
Appraisers and assessors of real estate	Bachelor's degree	Long-term on-the-job training	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Arbitrators, mediators, and conciliators	Bachelor's degree	Moderate-term on-the-job training	0 to 999	Faster than average	\$55,000 to \$74,999
Architects, except landscape and naval	Bachelor's degree	Internship/residency	5,000 to 9,999	Slower than average	\$75,000 or more
Architectural and civil drafters	Associate's degree	None	5,000 to 9,999	As fast as average	\$35,000 to \$54,999
Architectural and engineering managers	Bachelor's degree	None	5,000 to 9,999	As fast as average	\$75,000 or more
Architecture teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$75,000 or more
Archivists	Master's degree	None	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Area, ethnic, and cultural studies teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$55,000 to \$74,999
Art directors	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Art, drama, and music teachers, postsecondary	Master's degree	None	10,000 to 49,999	Faster than average	\$55,000 to \$74,999
Artists and related workers, all other	No formal educational credential	Long-term on-the-job training	0 to 999	As fast as average	\$55,000 to \$74,999
Assemblers and fabricators, all other	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	n/a
Astronomers	Doctoral or professional degree	None	0 to 999	Faster than average	\$75,000 or more
Athletes and sports competitors	No formal educational credential	Long-term on-the-job training	0 to 999	As fast as average	\$35,000 to \$54,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Athletic trainers	Bachelor's degree	None	5,000 to 9,999	Much faster than average	\$35,000 to \$54,999
Atmospheric and space scientists	Bachelor's degree	None	1,000 to 4,999	Faster than average	\$75,000 or more
Atmospheric, earth, marine, and space sciences teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$75,000 or more
Audio and video equipment technicians	Postsecondary nondegree award	Short-term on-the-job training	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Audiologists	Doctoral or professional degree	None	1,000 to 4,999	Much faster than average	\$75,000 or more
Audio-visual and multimedia collections specialists	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Automotive and watercraft service attendants	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	Faster than average	Less than \$25,000
Automotive body and related repairers	High school diploma or equivalent	Long-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Automotive glass installers and repairers	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$25,000 to \$34,999
Automotive service technicians and mechanics	Postsecondary nondegree award	Short-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Avionics technicians	Associate's degree	None	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Baggage porters and bellhops	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	As fast as average	Less than \$25,000
Bailiffs	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Bakers	No formal educational credential	Long-term on-the-job training	10,000 to 49,999	As fast as average	\$25,000 to \$34,999
Barbers	Postsecondary nondegree award	None	5,000 to 9,999	Faster than average	\$25,000 to \$34,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Bartenders	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	Slower than average	Less than \$25,000
Bicycle repairers	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Much faster than average	\$25,000 to \$34,999
Bill and account collectors	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Billing and posting clerks	High school diploma or equivalent	Moderate-term on-the-job training	50,000 or more	Faster than average	\$35,000 to \$54,999
Biochemists and biophysicists	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$75,000 or more
Biological science teachers, postsecondary	Doctoral or professional degree	None	5,000 to 9,999	Much faster than average	\$75,000 or more
Biological scientists, all other	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Biological technicians	Bachelor's degree	None	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Biomedical engineers	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Boilermakers	High school diploma or equivalent	Apprenticeship	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Bookkeeping, accounting, and auditing clerks	Some college, no degree	Moderate-term on-the-job training	Declining	Little or no change	\$35,000 to \$54,999
Brickmasons and blockmasons	High school diploma or equivalent	Apprenticeship	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Bridge and lock tenders	High school diploma or equivalent	Short-term on-the-job training	0 to 999	As fast as average	\$35,000 to \$54,999
Broadcast news analysts	Bachelor's degree	None	0 to 999	Little or no change	\$55,000 to \$74,999
Broadcast technicians	Associate's degree	Short-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Brokerage clerks	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$35,000 to \$54,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Budget analysts	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Building cleaning workers, all other	No formal educational credential	Short-term on-the-job training	1,000 to 4,999	Faster than average	\$25,000 to \$34,999
Bus and truck mechanics and diesel engine specialists	High school diploma or equivalent	Long-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Bus drivers, school or special client	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	As fast as average	\$25,000 to \$34,999
Bus drivers, transit and intercity	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Business operations specialists, all other	Bachelor's degree	None	50,000 or more	As fast as average	\$55,000 to \$74,999
Business teachers, postsecondary	Doctoral or professional degree	None	10,000 to 49,999	Much faster than average	\$75,000 or more
Butchers and meat cutters	No formal educational credential	Long-term on-the-job training	5,000 to 9,999	As fast as average	\$25,000 to \$34,999
Buyers and purchasing agents, farm products	Bachelor's degree	Moderate-term on-the-job training	Declining	Decline	n/a
Cabinetmakers and bench carpenters	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Slower than average	\$25,000 to \$34,999
Camera and photographic equipment repairers	High school diploma or equivalent	Long-term on-the-job training	0 to 999	Slower than average	\$35,000 to \$54,999
Camera operators, television, video, and motion picture	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Captains, mates, and pilots of water vessels	Postsecondary nondegree award	None	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Cardiovascular technologists and technicians	Associate's degree	None	5,000 to 9,999	Faster than average	\$55,000 to \$74,999
Career/technical education teachers, middle school	Bachelor's degree	None	0 to 999	As fast as average	\$55,000 to \$74,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Career/technical education teachers, secondary school	Bachelor's degree	None	5,000 to 9,999	As fast as average	\$55,000 to \$74,999
Cargo and freight agents	High school diploma or equivalent	Short-term on-the-job training	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Carpenters	High school diploma or equivalent	Apprenticeship	50,000 or more	As fast as average	\$35,000 to \$54,999
Carpet installers	No formal educational credential	Short-term on-the-job training	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Cartographers and photogrammetrists	Bachelor's degree	None	1,000 to 4,999	Much faster than average	\$55,000 to \$74,999
Cashiers	No formal educational credential	Short-term on-the-job training	Declining	Little or no change	Less than \$25,000
Cement masons and concrete finishers	No formal educational credential	Moderate-term on-the-job training	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Chefs and head cooks	High school diploma or equivalent	None	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Chemical engineers	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Chemical equipment operators and tenders	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Chemical plant and system operators	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$55,000 to \$74,999
Chemical technicians	Associate's degree	Moderate-term on-the-job training	1,000 to 4,999	Slower than average	\$35,000 to \$54,999
Chemistry teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$75,000 or more
Chemists	Bachelor's degree	None	5,000 to 9,999	As fast as average	\$75,000 or more
Chief executives	Bachelor's degree	None	Declining	Decline	\$75,000 or more
Child, family, and school social workers	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$35,000 to \$54,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Childcare workers	High school diploma or equivalent	Short-term on-the-job training	50,000 or more	As fast as average	Less than \$25,000
Chiropractors	Doctoral or professional degree	None	5,000 to 9,999	Faster than average	\$55,000 to \$74,999
Choreographers	High school diploma or equivalent	Long-term on-the-job training	0 to 999	Slower than average	\$35,000 to \$54,999
Civil engineering technicians	Associate's degree	None	5,000 to 9,999	As fast as average	\$35,000 to \$54,999
Civil engineers	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$75,000 or more
Claims adjusters, examiners, and investigators	High school diploma or equivalent	Long-term on-the-job training	Declining	Little or no change	\$55,000 to \$74,999
Cleaners of vehicles and equipment	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	Faster than average	Less than \$25,000
Cleaning, washing, and metal pickling equipment operators and tenders	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Little or no change	\$25,000 to \$34,999
Clergy	Bachelor's degree	Moderate-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Clinical, counseling, and school psychologists	Doctoral or professional degree	Internship/residency	10,000 to 49,999	Faster than average	\$75,000 or more
Coaches and scouts	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$25,000 to \$34,999
Coating, painting, and spraying machine setters, operators, and tenders	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Little or no change	\$25,000 to \$34,999
Coil winders, tapers, and finishers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Coin, vending, and amusement machine servicers and repairers	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Combined food preparation and serving workers, including fast food	No formal educational credential	Short-term on-the-job training	50,000 or more	Much faster than average	Less than \$25,000
Commercial and industrial designers	Bachelor's degree	None	1,000 to 4,999	Slower than average	\$55,000 to \$74,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Commercial divers	Postsecondary nondegree award	Moderate-term on-the-job training	0 to 999	Faster than average	\$35,000 to \$54,999
Commercial pilots	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Slower than average	\$75,000 or more
Communications equipment operators, all other	High school diploma or equivalent	Short-term on-the-job training	0 to 999	Faster than average	\$35,000 to \$54,999
Communications teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$55,000 to \$74,999
Community and social service specialists, all other	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Community health workers	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	Much faster than average	\$35,000 to \$54,999
Compensation and benefits managers	Bachelor's degree	None	0 to 999	As fast as average	\$75,000 or more
Compensation, benefits, and job analysis specialists	Bachelor's degree	None	5,000 to 9,999	As fast as average	\$55,000 to \$74,999
Compliance officers	Bachelor's degree	Moderate-term on-the-job training	10,000 to 49,999	As fast as average	\$55,000 to \$74,999
Computer and information research scientists	Master's degree	None	5,000 to 9,999	Much faster than average	\$75,000 or more
Computer and information systems managers	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$75,000 or more
Computer hardware engineers	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Computer network architects	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$75,000 or more
Computer network support specialists	Associate's degree	None	10,000 to 49,999	As fast as average	\$55,000 to \$74,999
Computer numerically controlled machine tool programmers, metal and plastic	Postsecondary nondegree award	Moderate-term on-the-job training	1,000 to 4,999	Much faster than average	\$35,000 to \$54,999
Computer occupations, all other	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$75,000 or more
Computer operators	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Computer programmers	Bachelor's degree	None	Declining	Decline	\$75,000 or more
Computer science teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Computer systems analysts	Bachelor's degree	None	50,000 or more	As fast as average	\$75,000 or more
Computer user support specialists	Some college, no degree	None	50,000 or more	Faster than average	\$35,000 to \$54,999
Computer, automated teller, and office machine repairers	Some college, no degree	Short-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Computer-controlled machine tool operators, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Little or no change	\$35,000 to \$54,999
Concierges	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Faster than average	\$25,000 to \$34,999
Conservation scientists	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Construction and building inspectors	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	Faster than average	\$55,000 to \$74,999
Construction and related workers, all other	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Faster than average	n/a
Construction laborers	No formal educational credential	Short-term on-the-job training	50,000 or more	Faster than average	\$35,000 to \$54,999
Construction managers	Bachelor's degree	Moderate-term on-the-job training	10,000 to 49,999	Faster than average	\$75,000 or more
Continuous mining machine operators	No formal educational credential	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Control and valve installers and repairers, except mechanical door	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Conveyor operators and tenders	No formal educational credential	Short-term on-the-job training	Declining	Little or no change	\$25,000 to \$34,999
Cooks, all other	No formal educational credential	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$25,000 to \$34,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Cooks, fast food	No formal educational credential	Short-term on-the-job training	Declining	Decline	Less than \$25,000
Cooks, institution and cafeteria	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	As fast as average	\$25,000 to \$34,999
Cooks, private household	Postsecondary nondegree award	None	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Cooks, restaurant	No formal educational credential	Moderate-term on-the-job training	50,000 or more	Faster than average	\$25,000 to \$34,999
Cooks, short order	No formal educational credential	Short-term on-the-job training	Declining	Decline	Less than \$25,000
Cooling and freezing equipment operators and tenders	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Little or no change	\$25,000 to \$34,999
Correctional officers and jailers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Correspondence clerks	High school diploma or equivalent	Short-term on-the-job training	0 to 999	Slower than average	\$35,000 to \$54,999
Cost estimators	Bachelor's degree	Moderate-term on-the-job training	10,000 to 49,999	Faster than average	\$55,000 to \$74,999
Costume attendants	High school diploma or equivalent	Short-term on-the-job training	0 to 999	Faster than average	\$35,000 to \$54,999
Counselors, all other	Master's degree	None	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Counter and rental clerks	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	As fast as average	\$25,000 to \$34,999
Counter attendants, cafeteria, food concession, and coffee shop	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	As fast as average	Less than \$25,000
Couriers and messengers	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	Faster than average	\$25,000 to \$34,999
Court reporters	Postsecondary nondegree award	Short-term on-the-job training	0 to 999	Slower than average	\$55,000 to \$74,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Court, municipal, and license clerks	High school diploma or equivalent	Moderate-term on-the-job training	5,000 to 9,999	As fast as average	\$35,000 to \$54,999
Craft artists	No formal educational credential	Long-term on-the-job training	0 to 999	Slower than average	\$25,000 to \$34,999
Crane and tower operators	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Credit analysts	Bachelor's degree	None	5,000 to 9,999	As fast as average	\$55,000 to \$74,999
Credit authorizers, checkers, and clerks	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Credit counselors	Bachelor's degree	Moderate-term on-the-job training	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Criminal justice and law enforcement teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$55,000 to \$74,999
Crossing guards	No formal educational credential	Short-term on-the-job training	5,000 to 9,999	As fast as average	\$25,000 to \$34,999
Crushing, grinding, and polishing machine setters, operators, and tenders	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Curators	Master's degree	None	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Customer service representatives	High school diploma or equivalent	Short-term on-the-job training	50,000 or more	As fast as average	\$25,000 to \$34,999
Cutters and trimmers, hand	No formal educational credential	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Cutting and slicing machine setters, operators, and tenders	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Dancers	No formal educational credential	Long-term on-the-job training	0 to 999	As fast as average	n/a



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Data entry keyers	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Database administrators	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$75,000 or more
Demonstrators and product promoters	No formal educational credential	Short-term on-the-job training	5,000 to 9,999	As fast as average	\$25,000 to \$34,999
Dental assistants	Postsecondary nondegree award	None	50,000 or more	Much faster than average	\$35,000 to \$54,999
Dental hygienists	Associate's degree	None	10,000 to 49,999	Much faster than average	\$55,000 to \$74,999
Dental laboratory technicians	High school diploma or equivalent	Moderate-term on-the-job training	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Dentists, all other specialists	Doctoral or professional degree	Internship/residency	0 to 999	Faster than average	\$75,000 or more
Dentists, general	Doctoral or professional degree	None	10,000 to 49,999	Much faster than average	\$75,000 or more
Derrick operators, oil and gas	No formal educational credential	Short-term on-the-job training	1,000 to 4,999	Much faster than average	\$35,000 to \$54,999
Designers, all other	Bachelor's degree	None	0 to 999	As fast as average	\$55,000 to \$74,999
Desktop publishers	Associate's degree	Short-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Detectives and criminal investigators	High school diploma or equivalent	Moderate-term on-the-job training	5,000 to 9,999	As fast as average	\$75,000 or more
Diagnostic medical sonographers	Associate's degree	None	10,000 to 49,999	Much faster than average	\$55,000 to \$74,999
Dietetic technicians	Associate's degree	None	1,000 to 4,999	As fast as average	\$25,000 to \$34,999
Dietitians and nutritionists	Bachelor's degree	Internship/residency	5,000 to 9,999	Much faster than average	\$55,000 to \$74,999
Dining room and cafeteria attendants and bartender helpers	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	As fast as average	Less than \$25,000
Directors, religious activities and education	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$35,000 to \$54,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Dishwashers	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	Slower than average	Less than \$25,000
Dispatchers, except police, fire, and ambulance	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Little or no change	\$35,000 to \$54,999
Door-to-door sales workers, news and street vendors, and related workers	No formal educational credential	Short-term on-the-job training	0 to 999	Little or no change	\$25,000 to \$34,999
Drafters, all other	Associate's degree	None	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Dredge operators	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	As fast as average	\$35,000 to \$54,999
Drilling and boring machine tool setters, operators, and tenders, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Driver/sales workers	High school diploma or equivalent	Short-term on-the-job training	Declining	Little or no change	Less than \$25,000
Drywall and ceiling tile installers	No formal educational credential	Moderate-term on-the-job training	1,000 to 4,999	Little or no change	\$35,000 to \$54,999
Earth drillers, except oil and gas	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Much faster than average	\$35,000 to \$54,999
Economics teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$75,000 or more
Economists	Master's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Editors	Bachelor's degree	None	Declining	Little or no change	\$55,000 to \$74,999
Education administrators, all other	Bachelor's degree	None	1,000 to 4,999	Faster than average	\$75,000 or more
Education administrators, elementary and secondary school	Master's degree	None	10,000 to 49,999	As fast as average	\$75,000 or more
Education administrators, postsecondary	Master's degree	None	10,000 to 49,999	Faster than average	\$75,000 or more
Education administrators, preschool and childcare center/program	Bachelor's degree	None	5,000 to 9,999	Faster than average	\$35,000 to \$54,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Education teachers, postsecondary	Doctoral or professional degree	None	5,000 to 9,999	Faster than average	\$55,000 to \$74,999
Education, training, and library workers, all other	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Educational, guidance, school, and vocational counselors	Master's degree	None	10,000 to 49,999	Faster than average	\$55,000 to \$74,999
Electric motor, power tool, and related repairers	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Electrical and electronic equipment assemblers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	n/a
Electrical and electronics drafters	Associate's degree	None	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Electrical and electronics engineering technicians	Associate's degree	None	1,000 to 4,999	Slower than average	\$55,000 to \$74,999
Electrical and electronics installers and repairers, transportation equipment	Postsecondary nondegree award	Long-term on-the-job training	0 to 999	Slower than average	\$55,000 to \$74,999
Electrical and electronics repairers, commercial and industrial equipment	Postsecondary nondegree award	Long-term on-the-job training	1,000 to 4,999	Slower than average	\$55,000 to \$74,999
Electrical and electronics repairers, powerhouse, substation, and relay	Postsecondary nondegree award	Moderate-term on-the-job training	0 to 999	Slower than average	\$75,000 or more
Electrical engineers	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$75,000 or more
Electrical power-line installers and repairers	High school diploma or equivalent	Long-term on-the-job training	10,000 to 49,999	Faster than average	\$55,000 to \$74,999
Electricians	High school diploma or equivalent	Apprenticeship	50,000 or more	As fast as average	\$55,000 to \$74,999
Electromechanical equipment assemblers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	n/a
Electro-mechanical technicians	Associate's degree	None	0 to 999	Slower than average	\$55,000 to \$74,999
Electronic equipment installers and repairers, motor vehicles	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Electronic home entertainment equipment installers and repairers	Postsecondary nondegree award	Short-term on-the-job training	0 to 999	Little or no change	\$35,000 to \$54,999
Electronics engineers, except computer	Bachelor's degree	None	5,000 to 9,999	Slower than average	\$75,000 or more
Elementary school teachers, except special education	Bachelor's degree	None	50,000 or more	As fast as average	\$55,000 to \$74,999
Elevator installers and repairers	High school diploma or equivalent	Apprenticeship	1,000 to 4,999	Faster than average	\$75,000 or more
Eligibility interviewers, government programs	High school diploma or equivalent	Moderate-term on-the-job training	5,000 to 9,999	As fast as average	\$35,000 to \$54,999
Embalmers	Associate's degree	Long-term on-the-job training	0 to 999	Little or no change	\$35,000 to \$54,999
Emergency management directors	Bachelor's degree	None	0 to 999	As fast as average	\$55,000 to \$74,999
Emergency medical technicians and paramedics	Postsecondary nondegree award	None	10,000 to 49,999	Much faster than average	\$25,000 to \$34,999
Engine and other machine assemblers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Engineering teachers, postsecondary	Doctoral or professional degree	None	5,000 to 9,999	Much faster than average	\$75,000 or more
Engineering technicians, except drafters, all other	Associate's degree	None	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Engineers, all other	Bachelor's degree	None	5,000 to 9,999	As fast as average	\$75,000 or more
English language and literature teachers, postsecondary	Doctoral or professional degree	None	5,000 to 9,999	Faster than average	\$55,000 to \$74,999
Entertainers and performers, sports and related workers, all other	No formal educational credential	Short-term on-the-job training	1,000 to 4,999	As fast as average	n/a
Entertainment attendants and related workers, all other	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	Faster than average	Less than \$25,000
Environmental engineering technicians	Associate's degree	None	1,000 to 4,999	Faster than average	\$35,000 to \$54,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Environmental engineers	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Environmental science and protection technicians, including health	Associate's degree	None	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Environmental science teachers, postsecondary	Doctoral or professional degree	None	0 to 999	Faster than average	\$75,000 or more
Environmental scientists and specialists, including health	Bachelor's degree	None	5,000 to 9,999	Faster than average	\$55,000 to \$74,999
Epidemiologists	Master's degree	None	0 to 999	As fast as average	\$55,000 to \$74,999
Etchers and engravers	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Little or no change	\$25,000 to \$34,999
Excavating and loading machine and dragline operators	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Executive secretaries and executive administrative assistants	High school diploma or equivalent	None	Declining	Decline	\$55,000 to \$74,999
Exercise physiologists	Bachelor's degree	None	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Explosives workers, ordnance handling experts, and blasters	High school diploma or equivalent	Long-term on-the-job training	0 to 999	As fast as average	\$35,000 to \$54,999
Extraction workers, all other	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Much faster than average	\$35,000 to \$54,999
Extruding and drawing machine setters, operators, and tenders, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Extruding and forming machine setters, operators, and tenders, synthetic and glass fibers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Extruding, forming, pressing, and compacting machine setters, operators, and tenders	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Fabric and apparel patternmakers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Fabric menders, except garment	High school diploma or equivalent	Long-term on-the-job training	0 to 999	Decline	\$25,000 to \$34,999
Fallers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Family and general practitioners	Doctoral or professional degree	Internship/residency	10,000 to 49,999	Faster than average	\$75,000 or more
Farm and home management advisors	Master's degree	None	0 to 999	As fast as average	\$35,000 to \$54,999
Farm equipment mechanics and service technicians	High school diploma or equivalent	Long-term on-the-job training	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Farm labor contractors	No formal educational credential	Short-term on-the-job training	0 to 999	As fast as average	\$35,000 to \$54,999
Farmers, ranchers, and other agricultural managers	High school diploma or equivalent	None	Declining	Little or no change	\$55,000 to \$74,999
Farmworkers and laborers, crop, nursery, and greenhouse	No formal educational credential	Short-term on-the-job training	5,000 to 9,999	Little or no change	Less than \$25,000
Farmworkers, farm, ranch, and aquacultural animals	No formal educational credential	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Fashion designers	Bachelor's degree	None	0 to 999	Slower than average	\$55,000 to \$74,999
Fence erectors	No formal educational credential	Moderate-term on-the-job training	1,000 to 4,999	Faster than average	\$25,000 to \$34,999
Fiberglass laminators and fabricators	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Little or no change	\$25,000 to \$34,999
File clerks	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Film and video editors	Bachelor's degree	None	5,000 to 9,999	Much faster than average	\$55,000 to \$74,999
Financial analysts	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$75,000 or more
Financial clerks, all other	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	Faster than average	\$35,000 to \$54,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Financial examiners	Bachelor's degree	Long-term on-the-job training	5,000 to 9,999	Faster than average	\$75,000 or more
Financial managers	Bachelor's degree	None	50,000 or more	Much faster than average	\$75,000 or more
Financial specialists, all other	Bachelor's degree	Moderate-term on-the-job training	10,000 to 49,999	Faster than average	\$55,000 to \$74,999
Fine artists, including painters, sculptors, and illustrators	Bachelor's degree	Long-term on-the-job training	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Fire inspectors and investigators	Postsecondary nondegree award	Moderate-term on-the-job training	0 to 999	As fast as average	\$55,000 to \$74,999
Firefighters	Postsecondary nondegree award	Long-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
First-line supervisors of construction trades and extraction workers	High school diploma or equivalent	None	50,000 or more	Faster than average	\$55,000 to \$74,999
First-line supervisors of correctional officers	High school diploma or equivalent	None	Declining	Decline	\$55,000 to \$74,999
First-line supervisors of farming, fishing, and forestry workers	High school diploma or equivalent	None	0 to 999	Slower than average	\$35,000 to \$54,999
First-line supervisors of fire fighting and prevention workers	Postsecondary nondegree award	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$75,000 or more
First-line supervisors of food preparation and serving workers	High school diploma or equivalent	None	50,000 or more	As fast as average	\$25,000 to \$34,999
First-line supervisors of helpers, laborers, and material movers, hand	High school diploma or equivalent	None	10,000 to 49,999	As fast as average	n/a
First-line supervisors of housekeeping and janitorial workers	High school diploma or equivalent	None	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
First-line supervisors of landscaping, lawn service, and groundskeeping workers	High school diploma or equivalent	None	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
First-line supervisors of mechanics, installers, and repairers	High school diploma or equivalent	None	10,000 to 49,999	As fast as average	\$55,000 to \$74,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
First-line supervisors of non-retail sales workers	High school diploma or equivalent	None	10,000 to 49,999	As fast as average	\$55,000 to \$74,999
First-line supervisors of office and administrative support workers	High school diploma or equivalent	None	50,000 or more	Slower than average	\$55,000 to \$74,999
First-line supervisors of personal service workers	High school diploma or equivalent	None	10,000 to 49,999	Much faster than average	\$35,000 to \$54,999
First-line supervisors of police and detectives	High school diploma or equivalent	Moderate-term on-the-job training	5,000 to 9,999	As fast as average	\$75,000 or more
First-line supervisors of production and operating workers	High school diploma or equivalent	None	Declining	Little or no change	\$55,000 to \$74,999
First-line supervisors of protective service workers, all other	High school diploma or equivalent	None	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
First-line supervisors of retail sales workers	High school diploma or equivalent	None	50,000 or more	Slower than average	\$35,000 to \$54,999
First-line supervisors of transportation and material-moving machine and vehicle operators	High school diploma or equivalent	None	10,000 to 49,999	As fast as average	n/a
Fish and game wardens	Bachelor's degree	Moderate-term on-the-job training	0 to 999	Slower than average	\$55,000 to \$74,999
Fitness trainers and aerobics instructors	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Flight attendants	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	Faster than average	\$55,000 to \$74,999
Floor layers, except carpet, wood, and hard tiles	No formal educational credential	Moderate-term on-the-job training	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Floor sanders and finishers	No formal educational credential	Moderate-term on-the-job training	0 to 999	As fast as average	\$35,000 to \$54,999
Floral designers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Food and tobacco roasting, baking, and drying machine operators and tenders	No formal educational credential	Moderate-term on-the-job training	Declining	Little or no change	\$25,000 to \$34,999
Food batchmakers	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Slower than average	\$25,000 to \$34,999
Food cooking machine operators and tenders	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Slower than average	\$25,000 to \$34,999
Food preparation and serving related workers, all other	No formal educational credential	Short-term on-the-job training	5,000 to 9,999	As fast as average	Less than \$25,000
Food preparation workers	No formal educational credential	Short-term on-the-job training	50,000 or more	As fast as average	Less than \$25,000
Food processing workers, all other	No formal educational credential	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$25,000 to \$34,999
Food scientists and technologists	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Food servers, nonrestaurant	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	Faster than average	Less than \$25,000
Food service managers	High school diploma or equivalent	None	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Foreign language and literature teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$55,000 to \$74,999
Forensic science technicians	Bachelor's degree	Moderate-term on-the-job training	1,000 to 4,999	Much faster than average	\$55,000 to \$74,999
Forest and conservation technicians	Associate's degree	None	1,000 to 4,999	Slower than average	\$35,000 to \$54,999
Forest and conservation workers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Forest fire inspectors and prevention specialists	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Much faster than average	\$35,000 to \$54,999
Foresters	Bachelor's degree	None	0 to 999	As fast as average	\$55,000 to \$74,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Forestry and conservation science teachers, postsecondary	Doctoral or professional degree	None	0 to 999	As fast as average	\$75,000 or more
Forging machine setters, operators, and tenders, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Foundry mold and coremakers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Fundraisers	Bachelor's degree	None	10,000 to 49,999	Much faster than average	\$55,000 to \$74,999
Funeral attendants	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	Slower than average	\$25,000 to \$34,999
Funeral service managers	Associate's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Furnace, kiln, oven, drier, and kettle operators and tenders	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Furniture finishers	High school diploma or equivalent	Short-term on-the-job training	Declining	Little or no change	\$25,000 to \$34,999
Gaming and sports book writers and runners	High school diploma or equivalent	Short-term on-the-job training	0 to 999	Slower than average	Less than \$25,000
Gaming cage workers	High school diploma or equivalent	Short-term on-the-job training	0 to 999	Little or no change	\$25,000 to \$34,999
Gaming change persons and booth cashiers	No formal educational credential	Short-term on-the-job training	0 to 999	Slower than average	Less than \$25,000
Gaming dealers	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	Little or no change	Less than \$25,000
Gaming managers	High school diploma or equivalent	None	0 to 999	Slower than average	\$55,000 to \$74,999
Gaming service workers, all other	High school diploma or equivalent	Short-term on-the-job training	0 to 999	Little or no change	\$25,000 to \$34,999
Gaming supervisors	High school diploma or equivalent	None	1,000 to 4,999	Slower than average	n/a



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Gaming surveillance officers and gaming investigators	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Slower than average	\$25,000 to \$34,999
Gas compressor and gas pumping station operators	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Slower than average	\$55,000 to \$74,999
Gas plant operators	High school diploma or equivalent	Long-term on-the-job training	0 to 999	Little or no change	\$55,000 to \$74,999
General and operations managers	Bachelor's degree	None	50,000 or more	As fast as average	\$75,000 or more
Genetic counselors	Master's degree	None	0 to 999	Much faster than average	\$75,000 or more
Geographers	Bachelor's degree	None	0 to 999	As fast as average	\$75,000 or more
Geography teachers, postsecondary	Doctoral or professional degree	None	0 to 999	As fast as average	\$75,000 or more
Geological and petroleum technicians	Associate's degree	Moderate-term on-the-job training	1,000 to 4,999	Much faster than average	\$35,000 to \$54,999
Geoscientists, except hydrologists and geographers	Bachelor's degree	None	1,000 to 4,999	Faster than average	\$75,000 or more
Glaziers	High school diploma or equivalent	Apprenticeship	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Graders and sorters, agricultural products	No formal educational credential	Short-term on-the-job training	Declining	Little or no change	Less than \$25,000
Graduate teaching assistants	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$25,000 to \$34,999
Graphic designers	Bachelor's degree	None	10,000 to 49,999	Slower than average	\$35,000 to \$54,999
Grinding and polishing workers, hand	No formal educational credential	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Grinding, lapping, polishing, and buffing machine tool setters, operators, and tenders, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Grounds maintenance workers, all other	No formal educational credential	Short-term on-the-job training	1,000 to 4,999	As fast as average	\$25,000 to \$34,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Hairdressers, hairstylists, and cosmetologists	Postsecondary nondegree award	None	50,000 or more	Faster than average	Less than \$25,000
Hazardous materials removal workers	High school diploma or equivalent	Moderate-term on-the-job training	5,000 to 9,999	Much faster than average	\$35,000 to \$54,999
Health and safety engineers, except mining safety engineers and inspectors	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Health diagnosing and treating practitioners, all other	Master's degree	None	5,000 to 9,999	Faster than average	\$55,000 to \$74,999
Health educators	Bachelor's degree	None	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Health specialties teachers, postsecondary	Doctoral or professional degree	None	50,000 or more	Much faster than average	\$75,000 or more
Health technologists and technicians, all other	Postsecondary nondegree award	None	10,000 to 49,999	Much faster than average	\$35,000 to \$54,999
Healthcare practitioners and technical workers, all other	Postsecondary nondegree award	None	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Healthcare social workers	Master's degree	Internship/residency	10,000 to 49,999	Much faster than average	\$55,000 to \$74,999
Healthcare support workers, all other	High school diploma or equivalent	None	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Hearing aid specialists	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Much faster than average	\$35,000 to \$54,999
Heat treating equipment setters, operators, and tenders, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Heating, air conditioning, and refrigeration mechanics and installers	Postsecondary nondegree award	Long-term on-the-job training	10,000 to 49,999	Much faster than average	\$35,000 to \$54,999
Heavy and tractor-trailer truck drivers	Postsecondary nondegree award	Short-term on-the-job training	50,000 or more	As fast as average	\$35,000 to \$54,999
Helpers, construction trades, all other	No formal educational credential	Short-term on-the-job training	1,000 to 4,999	Faster than average	\$25,000 to \$34,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Helpers--brickmasons, blockmasons, stonemasons, and tile and marble setters	No formal educational credential	Short-term on-the-job training	1,000 to 4,999	Faster than average	\$25,000 to \$34,999
Helpers--carpenters	No formal educational credential	Short-term on-the-job training	1,000 to 4,999	Faster than average	\$25,000 to \$34,999
Helpers--electricians	High school diploma or equivalent	Short-term on-the-job training	5,000 to 9,999	Faster than average	\$25,000 to \$34,999
Helpers--extraction workers	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Much faster than average	\$35,000 to \$54,999
Helpers--installation, maintenance, and repair workers	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	Faster than average	\$25,000 to \$34,999
Helpers--painters, paperhangers, plasterers, and stucco masons	No formal educational credential	Short-term on-the-job training	0 to 999	Slower than average	\$25,000 to \$34,999
Helpers--pipelayers, plumbers, pipefitters, and steamfitters	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	Much faster than average	\$25,000 to \$34,999
Helpers--production workers	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	Faster than average	\$25,000 to \$34,999
Helpers--roofers	No formal educational credential	Short-term on-the-job training	1,000 to 4,999	Faster than average	\$25,000 to \$34,999
Highway maintenance workers	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Historians	Master's degree	None	0 to 999	As fast as average	\$55,000 to \$74,999
History teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$55,000 to \$74,999
Hoist and winch operators	No formal educational credential	Short-term on-the-job training	0 to 999	Little or no change	\$35,000 to \$54,999
Home appliance repairers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Home economics teachers, postsecondary	Master's degree	None	0 to 999	As fast as average	\$55,000 to \$74,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Home health aides	High school diploma or equivalent	Short-term on-the-job training	50,000 or more	Much faster than average	Less than \$25,000
Hosts and hostesses, restaurant, lounge, and coffee shop	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	As fast as average	Less than \$25,000
Hotel, motel, and resort desk clerks	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	Slower than average	Less than \$25,000
Human resources assistants, except payroll and timekeeping	Associate's degree	None	Declining	Decline	\$35,000 to \$54,999
Human resources managers	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$75,000 or more
Human resources specialists	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$55,000 to \$74,999
Hydrologists	Bachelor's degree	None	0 to 999	Faster than average	\$75,000 or more
Industrial engineering technicians	Associate's degree	None	0 to 999	Little or no change	\$55,000 to \$74,999
Industrial engineers	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$75,000 or more
Industrial machinery mechanics	High school diploma or equivalent	Long-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Industrial production managers	Bachelor's degree	None	Declining	Little or no change	\$75,000 or more
Industrial truck and tractor operators	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	As fast as average	\$25,000 to \$34,999
Industrial-organizational psychologists	Master's degree	Internship/residency	0 to 999	As fast as average	\$75,000 or more
Information and record clerks, all other	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Information security analysts	Bachelor's degree	None	10,000 to 49,999	Much faster than average	\$75,000 or more
Inspectors, testers, sorters, samplers, and weighers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Installation, maintenance, and repair workers, all other	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Instructional coordinators	Master's degree	None	10,000 to 49,999	Faster than average	\$55,000 to \$74,999
Insulation workers, floor, ceiling, and wall	No formal educational credential	Short-term on-the-job training	0 to 999	Little or no change	\$35,000 to \$54,999
Insulation workers, mechanical	High school diploma or equivalent	Apprenticeship	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Insurance appraisers, auto damage	Postsecondary nondegree award	Moderate-term on-the-job training	0 to 999	As fast as average	\$55,000 to \$74,999
Insurance claims and policy processing clerks	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Insurance sales agents	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Insurance underwriters	Bachelor's degree	Moderate-term on-the-job training	Declining	Decline	\$55,000 to \$74,999
Interior designers	Bachelor's degree	None	1,000 to 4,999	Slower than average	\$35,000 to \$54,999
Internists, general	Doctoral or professional degree	Internship/residency	5,000 to 9,999	Much faster than average	\$75,000 or more
Interpreters and translators	Bachelor's degree	None	10,000 to 49,999	Much faster than average	\$35,000 to \$54,999
Interviewers, except eligibility and loan	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	As fast as average	\$25,000 to \$34,999
Janitors and cleaners, except maids and housekeeping cleaners	No formal educational credential	Short-term on-the-job training	50,000 or more	Faster than average	\$25,000 to \$34,999
Jewelers and precious stone and metal workers	High school diploma or equivalent	Long-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Judges, magistrate judges, and magistrates	Doctoral or professional degree	Short-term on-the-job training	1,000 to 4,999	As fast as average	\$75,000 or more
Judicial law clerks	Doctoral or professional degree	None	0 to 999	As fast as average	\$35,000 to \$54,999
Kindergarten teachers, except special education	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$55,000 to \$74,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Labor relations specialists	Bachelor's degree	None	Declining	Decline	\$55,000 to \$74,999
Laborers and freight, stock, and material movers, hand	No formal educational credential	Short-term on-the-job training	50,000 or more	As fast as average	\$25,000 to \$34,999
Landscape architects	Bachelor's degree	Internship/residency	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Landscaping and groundskeeping workers	No formal educational credential	Short-term on-the-job training	50,000 or more	Faster than average	\$25,000 to \$34,999
Lathe and turning machine tool setters, operators, and tenders, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Laundry and dry-cleaning workers	No formal educational credential	Short-term on-the-job training	Declining	Little or no change	Less than \$25,000
Law teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$75,000 or more
Lawyers	Doctoral or professional degree	None	50,000 or more	As fast as average	\$75,000 or more
Layout workers, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Legal secretaries	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Legal support workers, all other	Associate's degree	None	1,000 to 4,999	Slower than average	\$55,000 to \$74,999
Legislators	Bachelor's degree	None	1,000 to 4,999	As fast as average	Less than \$25,000
Librarians	Master's degree	None	10,000 to 49,999	As fast as average	\$55,000 to \$74,999
Library assistants, clerical	High school diploma or equivalent	Short-term on-the-job training	5,000 to 9,999	As fast as average	\$25,000 to \$34,999
Library science teachers, postsecondary	Doctoral or professional degree	None	0 to 999	As fast as average	\$55,000 to \$74,999
Library technicians	Postsecondary nondegree award	None	5,000 to 9,999	As fast as average	\$25,000 to \$34,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Licensed practical and licensed vocational nurses	Postsecondary nondegree award	None	50,000 or more	Faster than average	\$35,000 to \$54,999
Life scientists, all other	Bachelor's degree	None	0 to 999	As fast as average	\$75,000 or more
Life, physical, and social science technicians, all other	Associate's degree	None	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Lifeguards, ski patrol, and other recreational protective service workers	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	As fast as average	Less than \$25,000
Light truck or delivery services drivers	High school diploma or equivalent	Short-term on-the-job training	50,000 or more	As fast as average	\$25,000 to \$34,999
Loading machine operators, underground mining	No formal educational credential	Short-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Loan interviewers and clerks	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Loan officers	Bachelor's degree	Moderate-term on-the-job training	10,000 to 49,999	Faster than average	\$55,000 to \$74,999
Locker room, coatroom, and dressing room attendants	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	As fast as average	Less than \$25,000
Locksmiths and safe repairers	High school diploma or equivalent	Long-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Locomotive engineers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$55,000 to \$74,999
Locomotive firers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$55,000 to \$74,999
Lodging managers	High school diploma or equivalent	None	1,000 to 4,999	Slower than average	\$35,000 to \$54,999
Log graders and scalers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Logging equipment operators	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Logging workers, all other	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Logisticians	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$55,000 to \$74,999
Machine feeders and offbearers	No formal educational credential	Short-term on-the-job training	1,000 to 4,999	Slower than average	\$25,000 to \$34,999
Machinists	High school diploma or equivalent	Long-term on-the-job training	5,000 to 9,999	Slower than average	\$35,000 to \$54,999
Magnetic resonance imaging technologists	Associate's degree	None	5,000 to 9,999	Faster than average	\$55,000 to \$74,999
Maids and housekeeping cleaners	No formal educational credential	Short-term on-the-job training	50,000 or more	As fast as average	Less than \$25,000
Mail clerks and mail machine operators, except postal service	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Maintenance and repair workers, general	High school diploma or equivalent	Moderate-term on-the-job training	50,000 or more	As fast as average	\$35,000 to \$54,999
Maintenance workers, machinery	High school diploma or equivalent	Long-term on-the-job training	5,000 to 9,999	As fast as average	\$35,000 to \$54,999
Makeup artists, theatrical and performance	Postsecondary nondegree award	None	0 to 999	Faster than average	\$55,000 to \$74,999
Management analysts	Bachelor's degree	None	50,000 or more	Faster than average	\$75,000 or more
Managers, all other	Bachelor's degree	None	50,000 or more	As fast as average	\$75,000 or more
Manicurists and pedicurists	Postsecondary nondegree award	None	10,000 to 49,999	Faster than average	Less than \$25,000
Manufactured building and mobile home installers	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Marine engineers and naval architects	Bachelor's degree	None	1,000 to 4,999	Faster than average	\$75,000 or more
Market research analysts and marketing specialists	Bachelor's degree	None	50,000 or more	Much faster than average	\$55,000 to \$74,999
Marketing managers	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$75,000 or more



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Marriage and family therapists	Master's degree	Internship/residency	5,000 to 9,999	Much faster than average	\$35,000 to \$54,999
Massage therapists	Postsecondary nondegree award	None	10,000 to 49,999	Much faster than average	\$35,000 to \$54,999
Material moving workers, all other	No formal educational credential	Short-term on-the-job training	1,000 to 4,999	As fast as average	\$25,000 to \$34,999
Materials engineers	Bachelor's degree	None	0 to 999	Slower than average	\$75,000 or more
Materials scientists	Bachelor's degree	None	0 to 999	As fast as average	\$75,000 or more
Mathematical science occupations, all other	Bachelor's degree	None	0 to 999	Faster than average	n/a
Mathematical science teachers, postsecondary	Doctoral or professional degree	None	5,000 to 9,999	As fast as average	\$55,000 to \$74,999
Mathematical technicians	Bachelor's degree	None	0 to 999	As fast as average	n/a
Mathematicians	Master's degree	None	0 to 999	Much faster than average	\$75,000 or more
Meat, poultry, and fish cutters and trimmers	No formal educational credential	Short-term on-the-job training	1,000 to 4,999	Little or no change	\$25,000 to \$34,999
Mechanical door repairers	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Mechanical drafters	Associate's degree	None	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Mechanical engineering technicians	Associate's degree	None	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Mechanical engineers	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$75,000 or more
Media and communication equipment workers, all other	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	As fast as average	\$75,000 or more
Media and communication workers, all other	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Medical and clinical laboratory technicians	Associate's degree	None	10,000 to 49,999	Faster than average	n/a
Medical and clinical laboratory technologists	Bachelor's degree	None	10,000 to 49,999	Faster than average	n/a
Medical and health services managers	Bachelor's degree	None	50,000 or more	Much faster than average	\$75,000 or more



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Medical appliance technicians	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Medical assistants	Postsecondary nondegree award	None	50,000 or more	Much faster than average	\$25,000 to \$34,999
Medical equipment preparers	High school diploma or equivalent	Moderate-term on-the-job training	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Medical equipment repairers	Associate's degree	Moderate-term on-the-job training	1,000 to 4,999	Slower than average	\$35,000 to \$54,999
Medical records and health information technicians	Postsecondary nondegree award	None	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Medical scientists, except epidemiologists	Doctoral or professional degree	None	10,000 to 49,999	Faster than average	\$75,000 or more
Medical secretaries	High school diploma or equivalent	Moderate-term on-the-job training	50,000 or more	Much faster than average	\$35,000 to \$54,999
Medical transcriptionists	Postsecondary nondegree award	None	Declining	Decline	\$25,000 to \$34,999
Meeting, convention, and event planners	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Mental health and substance abuse social workers	Master's degree	Internship/residency	10,000 to 49,999	Much faster than average	\$35,000 to \$54,999
Mental health counselors	Master's degree	Internship/residency	10,000 to 49,999	Much faster than average	n/a
Merchandise displayers and window trimmers	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	Slower than average	\$25,000 to \$34,999
Metal workers and plastic workers, all other	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Metal-refining furnace operators and tenders	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Meter readers, utilities	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Microbiologists	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$55,000 to \$74,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Middle school teachers, except special and career/technical education	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$55,000 to \$74,999
Milling and planing machine setters, operators, and tenders, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Millwrights	High school diploma or equivalent	Apprenticeship	1,000 to 4,999	Faster than average	\$55,000 to \$74,999
Mine cutting and channeling machine operators	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Mine shuttle car operators	No formal educational credential	Short-term on-the-job training	Declining	Decline	\$55,000 to \$74,999
Mining and geological engineers, including mining safety engineers	Bachelor's degree	None	0 to 999	As fast as average	\$75,000 or more
Mining machine operators, all other	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Little or no change	\$35,000 to \$54,999
Mixing and blending machine setters, operators, and tenders	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Mobile heavy equipment mechanics, except engines	High school diploma or equivalent	Long-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Model makers, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$55,000 to \$74,999
Model makers, wood	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Slower than average	\$35,000 to \$54,999
Models	No formal educational credential	None	Declining	Little or no change	Less than \$25,000
Molders, shapers, and casters, except metal and plastic	High school diploma or equivalent	Long-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Molding, coremaking, and casting machine setters, operators, and tenders, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Morticians, undertakers, and funeral directors	Associate's degree	Long-term on-the-job training	1,000 to 4,999	Slower than average	\$35,000 to \$54,999
Motion picture projectionists	No formal educational credential	Short-term on-the-job training	Declining	Decline	Less than \$25,000
Motor vehicle operators, all other	No formal educational credential	Short-term on-the-job training	5,000 to 9,999	Faster than average	\$25,000 to \$34,999
Motorboat mechanics and service technicians	High school diploma or equivalent	Long-term on-the-job training	Declining	Little or no change	\$35,000 to \$54,999
Motorboat operators	Postsecondary nondegree award	None	0 to 999	As fast as average	\$35,000 to \$54,999
Motorcycle mechanics	Postsecondary nondegree award	Short-term on-the-job training	0 to 999	Little or no change	\$35,000 to \$54,999
Multimedia artists and animators	Bachelor's degree	None	5,000 to 9,999	As fast as average	\$55,000 to \$74,999
Multiple machine tool setters, operators, and tenders, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Museum technicians and conservators	Bachelor's degree	None	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Music directors and composers	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Musical instrument repairers and tuners	High school diploma or equivalent	Apprenticeship	0 to 999	Little or no change	\$35,000 to \$54,999
Musicians and singers	No formal educational credential	Long-term on-the-job training	10,000 to 49,999	As fast as average	n/a
Natural sciences managers	Bachelor's degree	None	5,000 to 9,999	Faster than average	\$75,000 or more
Network and computer systems administrators	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$75,000 or more
New accounts clerks	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Nonfarm animal caretakers	High school diploma or equivalent	Short-term on-the-job training	50,000 or more	Much faster than average	Less than \$25,000



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Nuclear engineers	Bachelor's degree	None	0 to 999	Slower than average	\$75,000 or more
Nuclear medicine technologists	Associate's degree	None	1,000 to 4,999	Faster than average	\$75,000 or more
Nuclear power reactor operators	High school diploma or equivalent	Long-term on-the-job training	Declining	Decline	\$75,000 or more
Nuclear technicians	Associate's degree	Moderate-term on-the-job training	0 to 999	Little or no change	\$75,000 or more
Nurse anesthetists	Master's degree	None	5,000 to 9,999	Much faster than average	\$75,000 or more
Nurse midwives	Master's degree	None	1,000 to 4,999	Much faster than average	\$75,000 or more
Nurse practitioners	Master's degree	None	50,000 or more	Much faster than average	\$75,000 or more
Nursing assistants	Postsecondary nondegree award	None	50,000 or more	Faster than average	\$25,000 to \$34,999
Nursing instructors and teachers, postsecondary	Doctoral or professional degree	None	10,000 to 49,999	Much faster than average	\$55,000 to \$74,999
Obstetricians and gynecologists	Doctoral or professional degree	Internship/residency	1,000 to 4,999	Much faster than average	\$75,000 or more
Occupational health and safety specialists	Bachelor's degree	None	5,000 to 9,999	As fast as average	\$55,000 to \$74,999
Occupational health and safety technicians	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Occupational therapists	Master's degree	None	10,000 to 49,999	Much faster than average	\$75,000 or more
Occupational therapy aides	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	Much faster than average	\$25,000 to \$34,999
Occupational therapy assistants	Associate's degree	None	10,000 to 49,999	Much faster than average	\$55,000 to \$74,999
Office and administrative support workers, all other	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	As fast as average	\$25,000 to \$34,999
Office clerks, general	High school diploma or equivalent	Short-term on-the-job training	Declining	Little or no change	\$25,000 to \$34,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Office machine operators, except computer	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Operating engineers and other construction equipment operators	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Operations research analysts	Bachelor's degree	None	10,000 to 49,999	Much faster than average	\$75,000 or more
Ophthalmic laboratory technicians	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Faster than average	\$25,000 to \$34,999
Ophthalmic medical technicians	Postsecondary nondegree award	None	5,000 to 9,999	Much faster than average	\$35,000 to \$54,999
Opticians, dispensing	High school diploma or equivalent	Long-term on-the-job training	10,000 to 49,999	Much faster than average	\$35,000 to \$54,999
Optometrists	Doctoral or professional degree	None	5,000 to 9,999	Much faster than average	\$75,000 or more
Oral and maxillofacial surgeons	Doctoral or professional degree	Internship/residency	1,000 to 4,999	Much faster than average	\$75,000 or more
Order clerks	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Orderlies	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	As fast as average	\$25,000 to \$34,999
Orthodontists	Doctoral or professional degree	Internship/residency	1,000 to 4,999	Much faster than average	\$75,000 or more
Orthotists and prosthetists	Master's degree	Internship/residency	1,000 to 4,999	Much faster than average	\$55,000 to \$74,999
Outdoor power equipment and other small engine mechanics	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Packaging and filling machine operators and tenders	High school diploma or equivalent	Moderate-term on-the-job training	5,000 to 9,999	Slower than average	\$25,000 to \$34,999
Packers and packagers, hand	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	Slower than average	Less than \$25,000





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Painters, construction and maintenance	No formal educational credential	Moderate-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Painters, transportation equipment	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Painting, coating, and decorating workers	No formal educational credential	Moderate-term on-the-job training	0 to 999	Little or no change	\$25,000 to \$34,999
Paper goods machine setters, operators, and tenders	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Paperhangers	No formal educational credential	Long-term on-the-job training	0 to 999	As fast as average	\$35,000 to \$54,999
Paralegals and legal assistants	Associate's degree	None	10,000 to 49,999	Much faster than average	\$35,000 to \$54,999
Parking enforcement workers	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Parking lot attendants	No formal educational credential	Short-term on-the-job training	5,000 to 9,999	As fast as average	Less than \$25,000
Parts salespersons	No formal educational credential	Moderate-term on-the-job training	10,000 to 49,999	As fast as average	\$25,000 to \$34,999
Patternmakers, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Patternmakers, wood	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Slower than average	\$55,000 to \$74,999
Paving, surfacing, and tamping equipment operators	High school diploma or equivalent	Moderate-term on-the-job training	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Payroll and timekeeping clerks	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Little or no change	\$35,000 to \$54,999
Pediatricians, general	Doctoral or professional degree	Internship/residency	1,000 to 4,999	Much faster than average	\$75,000 or more
Personal care aides	High school diploma or equivalent	Short-term on-the-job training	50,000 or more	Much faster than average	Less than \$25,000



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Personal care and service workers, all other	High school diploma or equivalent	Short-term on-the-job training	5,000 to 9,999	As fast as average	\$25,000 to \$34,999
Personal financial advisors	Bachelor's degree	Long-term on-the-job training	10,000 to 49,999	Much faster than average	\$75,000 or more
Pest control workers	High school diploma or equivalent	Moderate-term on-the-job training	5,000 to 9,999	As fast as average	\$35,000 to \$54,999
Pesticide handlers, sprayers, and applicators, vegetation	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Petroleum engineers	Bachelor's degree	None	5,000 to 9,999	Much faster than average	\$75,000 or more
Petroleum pump system operators, refinery operators, and gaugers	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Slower than average	\$55,000 to \$74,999
Pharmacists	Doctoral or professional degree	None	10,000 to 49,999	As fast as average	\$75,000 or more
Pharmacy aides	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Pharmacy technicians	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	Faster than average	\$25,000 to \$34,999
Philosophy and religion teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$55,000 to \$74,999
Phlebotomists	Postsecondary nondegree award	None	10,000 to 49,999	Much faster than average	\$25,000 to \$34,999
Photographers	High school diploma or equivalent	Long-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Photographic process workers and processing machine operators	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Physical scientists, all other	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Physical therapist aides	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	Much faster than average	\$25,000 to \$34,999
Physical therapist assistants	Associate's degree	None	10,000 to 49,999	Much faster than average	\$55,000 to \$74,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Physical therapists	Doctoral or professional degree	None	50,000 or more	Much faster than average	\$75,000 or more
Physician assistants	Master's degree	None	10,000 to 49,999	Much faster than average	\$75,000 or more
Physicians and surgeons, all other	Doctoral or professional degree	Internship/residency	10,000 to 49,999	Faster than average	\$75,000 or more
Physicists	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$75,000 or more
Physics teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$75,000 or more
Pile-driver operators	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Much faster than average	\$55,000 to \$74,999
Pipelayers	No formal educational credential	Short-term on-the-job training	5,000 to 9,999	Much faster than average	\$35,000 to \$54,999
Plant and system operators, all other	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Slower than average	\$55,000 to \$74,999
Plasterers and stucco masons	No formal educational credential	Long-term on-the-job training	1,000 to 4,999	Slower than average	\$35,000 to \$54,999
Plating and coating machine setters, operators, and tenders, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Plumbers, pipefitters, and steamfitters	High school diploma or equivalent	Apprenticeship	50,000 or more	Much faster than average	\$35,000 to \$54,999
Podiatrists	Doctoral or professional degree	Internship/residency	1,000 to 4,999	Faster than average	\$75,000 or more
Police and sheriff's patrol officers	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	As fast as average	\$55,000 to \$74,999
Police, fire, and ambulance dispatchers	High school diploma or equivalent	Moderate-term on-the-job training	5,000 to 9,999	As fast as average	\$35,000 to \$54,999
Political science teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$75,000 or more



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Political scientists	Master's degree	None	0 to 999	Slower than average	\$75,000 or more
Postal service clerks	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$55,000 to \$74,999
Postal service mail carriers	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$55,000 to \$74,999
Postal service mail sorters, processors, and processing machine operators	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$55,000 to \$74,999
Postmasters and mail superintendents	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$75,000 or more
Postsecondary teachers, all other	Doctoral or professional degree	None	10,000 to 49,999	As fast as average	\$55,000 to \$74,999
Pourers and casters, metal	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Power distributors and dispatchers	High school diploma or equivalent	Long-term on-the-job training	Declining	Decline	\$75,000 or more
Power plant operators	High school diploma or equivalent	Long-term on-the-job training	0 to 999	Little or no change	\$75,000 or more
Precision instrument and equipment repairers, all other	High school diploma or equivalent	Long-term on-the-job training	0 to 999	Slower than average	\$55,000 to \$74,999
Prepress technicians and workers	Postsecondary nondegree award	None	Declining	Decline	\$35,000 to \$54,999
Preschool teachers, except special education	Associate's degree	None	50,000 or more	Faster than average	\$25,000 to \$34,999
Pressers, textile, garment, and related materials	No formal educational credential	Short-term on-the-job training	Declining	Decline	Less than \$25,000
Print binding and finishing workers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Printing press operators	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Private detectives and investigators	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Probation officers and correctional treatment specialists	Bachelor's degree	Short-term on-the-job training	5,000 to 9,999	As fast as average	\$35,000 to \$54,999
Procurement clerks	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Producers and directors	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$55,000 to \$74,999
Production workers, all other	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	Slower than average	\$25,000 to \$34,999
Production, planning, and expediting clerks	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Proofreaders and copy markers	Bachelor's degree	None	0 to 999	Slower than average	\$35,000 to \$54,999
Property, real estate, and community association managers	High school diploma or equivalent	None	10,000 to 49,999	Faster than average	\$55,000 to \$74,999
Prosthodontists	Doctoral or professional degree	Internship/residency	0 to 999	Much faster than average	\$75,000 or more
Protective service workers, all other	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	As fast as average	\$25,000 to \$34,999
Psychiatric aides	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	As fast as average	\$25,000 to \$34,999
Psychiatric technicians	Postsecondary nondegree award	Short-term on-the-job training	1,000 to 4,999	As fast as average	\$25,000 to \$34,999
Psychiatrists	Doctoral or professional degree	Internship/residency	1,000 to 4,999	Faster than average	\$75,000 or more
Psychologists, all other	Master's degree	Internship/residency	1,000 to 4,999	Faster than average	\$75,000 or more
Psychology teachers, postsecondary	Doctoral or professional degree	None	5,000 to 9,999	Much faster than average	\$75,000 or more
Public address system and other announcers	High school diploma or equivalent	Short-term on-the-job training	0 to 999	Slower than average	\$25,000 to \$34,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Public relations and fundraising managers	Bachelor's degree	None	5,000 to 9,999	Faster than average	\$75,000 or more
Public relations specialists	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$55,000 to \$74,999
Pump operators, except wellhead pumpers	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Purchasing agents, except wholesale, retail, and farm products	Bachelor's degree	Moderate-term on-the-job training	Declining	Decline	n/a
Purchasing managers	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Radiation therapists	Associate's degree	None	1,000 to 4,999	Faster than average	\$75,000 or more
Radio and television announcers	Bachelor's degree	None	Declining	Decline	\$25,000 to \$34,999
Radio operators	High school diploma or equivalent	Short-term on-the-job training	0 to 999	Little or no change	\$35,000 to \$54,999
Radio, cellular, and tower equipment installers and repairs	Associate's degree	Moderate-term on-the-job training	0 to 999	As fast as average	\$35,000 to \$54,999
Radiologic technologists	Associate's degree	None	10,000 to 49,999	Faster than average	\$55,000 to \$74,999
Rail car repairers	High school diploma or equivalent	Long-term on-the-job training	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Rail transportation workers, all other	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Slower than average	\$55,000 to \$74,999
Rail yard engineers, dinkey operators, and hostlers	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Slower than average	\$35,000 to \$54,999
Railroad brake, signal, and switch operators	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$55,000 to \$74,999
Railroad conductors and yardmasters	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$55,000 to \$74,999
Rail-track laying and maintenance equipment operators	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$55,000 to \$74,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Real estate brokers	High school diploma or equivalent	None	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Real estate sales agents	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Receptionists and information clerks	High school diploma or equivalent	Short-term on-the-job training	50,000 or more	As fast as average	\$25,000 to \$34,999
Recreation and fitness studies teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$55,000 to \$74,999
Recreation workers	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	As fast as average	\$25,000 to \$34,999
Recreational therapists	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Recreational vehicle service technicians	High school diploma or equivalent	Long-term on-the-job training	Declining	Little or no change	\$35,000 to \$54,999
Refractory materials repairers, except brickmasons	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Refuse and recyclable material collectors	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Registered nurses	Bachelor's degree	None	50,000 or more	Much faster than average	\$55,000 to \$74,999
Rehabilitation counselors	Master's degree	None	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Reinforcing iron and rebar workers	High school diploma or equivalent	Apprenticeship	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Religious workers, all other	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$25,000 to \$34,999
Reporters and correspondents	Bachelor's degree	None	Declining	Decline	\$35,000 to \$54,999
Reservation and transportation ticket agents and travel clerks	High school diploma or equivalent	Short-term on-the-job training	5,000 to 9,999	Slower than average	\$35,000 to \$54,999
Residential advisors	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	Faster than average	\$25,000 to \$34,999
Respiratory therapists	Associate's degree	None	10,000 to 49,999	Much faster than average	\$55,000 to \$74,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Respiratory therapy technicians	Associate's degree	None	Declining	Decline	\$35,000 to \$54,999
Retail salespersons	No formal educational credential	Short-term on-the-job training	50,000 or more	Slower than average	Less than \$25,000
Riggers	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Rock splitters, quarry	No formal educational credential	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Rolling machine setters, operators, and tenders, metal and plastic	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Roof bolters, mining	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$55,000 to \$74,999
Roofers	No formal educational credential	Moderate-term on-the-job training	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Rotary drill operators, oil and gas	No formal educational credential	Moderate-term on-the-job training	1,000 to 4,999	Much faster than average	\$35,000 to \$54,999
Roustabouts, oil and gas	No formal educational credential	Moderate-term on-the-job training	10,000 to 49,999	Much faster than average	\$35,000 to \$54,999
Sailors and marine oilers	No formal educational credential	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Sales and related workers, all other	High school diploma or equivalent	None	10,000 to 49,999	Faster than average	\$25,000 to \$34,999
Sales engineers	Bachelor's degree	Moderate-term on-the-job training	5,000 to 9,999	As fast as average	\$75,000 or more
Sales managers	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$75,000 or more
Sales representatives, services, all other	High school diploma or equivalent	Moderate-term on-the-job training	50,000 or more	Faster than average	\$35,000 to \$54,999
Sales representatives, wholesale and manufacturing, except technical and scientific products	High school diploma or equivalent	Moderate-term on-the-job training	50,000 or more	As fast as average	\$55,000 to \$74,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Sales representatives, wholesale and manufacturing, technical and scientific products	Bachelor's degree	Moderate-term on-the-job training	10,000 to 49,999	As fast as average	\$75,000 or more
Sawing machine setters, operators, and tenders, wood	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Little or no change	\$25,000 to \$34,999
Secondary school teachers, except special and career/technical education	Bachelor's degree	None	50,000 or more	As fast as average	\$55,000 to \$74,999
Secretaries and administrative assistants, except legal, medical, and executive	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Securities, commodities, and financial services sales agents	Bachelor's degree	Moderate-term on-the-job training	10,000 to 49,999	As fast as average	\$55,000 to \$74,999
Security and fire alarm systems installers	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Security guards	High school diploma or equivalent	Short-term on-the-job training	50,000 or more	As fast as average	\$25,000 to \$34,999
Segmental pavers	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Faster than average	n/a
Self-enrichment education teachers	High school diploma or equivalent	None	50,000 or more	Much faster than average	\$35,000 to \$54,999
Semiconductor processors	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Separating, filtering, clarifying, precipitating, and still machine setters, operators, and tenders	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Little or no change	\$35,000 to \$54,999
Septic tank servicers and sewer pipe cleaners	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Much faster than average	\$35,000 to \$54,999
Service unit operators, oil, gas, and mining	No formal educational credential	Moderate-term on-the-job training	5,000 to 9,999	Much faster than average	\$35,000 to \$54,999
Set and exhibit designers	Bachelor's degree	None	1,000 to 4,999	Faster than average	\$35,000 to \$54,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Sewers, hand	No formal educational credential	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Sewing machine operators	No formal educational credential	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Shampooers	No formal educational credential	Short-term on-the-job training	1,000 to 4,999	Faster than average	Less than \$25,000
Sheet metal workers	High school diploma or equivalent	Apprenticeship	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Ship engineers	Postsecondary nondegree award	None	0 to 999	As fast as average	\$55,000 to \$74,999
Shipping, receiving, and traffic clerks	High school diploma or equivalent	Short-term on-the-job training	0 to 999	Little or no change	\$25,000 to \$34,999
Shoe and leather workers and repairers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Shoe machine operators and tenders	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Signal and track switch repairers	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Little or no change	\$55,000 to \$74,999
Skincare specialists	Postsecondary nondegree award	None	5,000 to 9,999	Faster than average	\$25,000 to \$34,999
Slaughterers and meat packers	No formal educational credential	Short-term on-the-job training	0 to 999	Little or no change	\$25,000 to \$34,999
Slot supervisors	High school diploma or equivalent	None	0 to 999	As fast as average	n/a
Social and community service managers	Bachelor's degree	None	10,000 to 49,999	Much faster than average	\$55,000 to \$74,999
Social and human service assistants	High school diploma or equivalent	Short-term on-the-job training	50,000 or more	Much faster than average	\$25,000 to \$34,999
Social science research assistants	Bachelor's degree	None	1,000 to 4,999	Slower than average	\$35,000 to \$54,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Social sciences teachers, postsecondary, all other	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$55,000 to \$74,999
Social scientists and related workers, all other	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$75,000 or more
Social work teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$55,000 to \$74,999
Social workers, all other	Bachelor's degree	None	5,000 to 9,999	As fast as average	\$55,000 to \$74,999
Sociologists	Master's degree	None	0 to 999	Little or no change	\$75,000 or more
Sociology teachers, postsecondary	Doctoral or professional degree	None	1,000 to 4,999	Faster than average	\$55,000 to \$74,999
Software developers, applications	Bachelor's degree	None	50,000 or more	Much faster than average	\$75,000 or more
Software developers, systems software	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$75,000 or more
Soil and plant scientists	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Solar photovoltaic installers	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	Much faster than average	\$35,000 to \$54,999
Sound engineering technicians	Postsecondary nondegree award	Short-term on-the-job training	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Special education teachers, all other	Bachelor's degree	None	1,000 to 4,999	Faster than average	\$55,000 to \$74,999
Special education teachers, kindergarten and elementary school	Bachelor's degree	None	10,000 to 49,999	As fast as average	\$55,000 to \$74,999
Special education teachers, middle school	Bachelor's degree	None	5,000 to 9,999	As fast as average	\$55,000 to \$74,999
Special education teachers, preschool	Bachelor's degree	None	1,000 to 4,999	Faster than average	\$55,000 to \$74,999
Special education teachers, secondary school	Bachelor's degree	None	5,000 to 9,999	As fast as average	\$55,000 to \$74,999
Speech-language pathologists	Master's degree	Internship/residency	10,000 to 49,999	Much faster than average	\$75,000 or more
Stationary engineers and boiler operators	High school diploma or equivalent	Long-term on-the-job training	1,000 to 4,999	As fast as average	\$55,000 to \$74,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Statistical assistants	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Statisticians	Master's degree	None	10,000 to 49,999	Much faster than average	\$75,000 or more
Stock clerks and order fillers	High school diploma or equivalent	Short-term on-the-job training	50,000 or more	As fast as average	\$25,000 to \$34,999
Stonemasons	High school diploma or equivalent	Apprenticeship	1,000 to 4,999	Faster than average	\$35,000 to \$54,999
Structural iron and steel workers	High school diploma or equivalent	Apprenticeship	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Structural metal fabricators and fitters	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Substance abuse and behavioral disorder counselors	Bachelor's degree	None	10,000 to 49,999	Much faster than average	n/a
Subway and streetcar operators	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Slower than average	\$55,000 to \$74,999
Surgeons	Doctoral or professional degree	Internship/residency	5,000 to 9,999	Faster than average	\$75,000 or more
Surgical technologists	Postsecondary nondegree award	None	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Survey researchers	Master's degree	None	0 to 999	Slower than average	\$55,000 to \$74,999
Surveying and mapping technicians	High school diploma or equivalent	Moderate-term on-the-job training	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Surveyors	Bachelor's degree	Internship/residency	5,000 to 9,999	Faster than average	\$55,000 to \$74,999
Switchboard operators, including answering service	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Tailors, dressmakers, and custom sewers	No formal educational credential	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Tank car, truck, and ship loaders	No formal educational credential	Short-term on-the-job training	0 to 999	As fast as average	\$35,000 to \$54,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Tapers	No formal educational credential	Moderate-term on-the-job training	0 to 999	Little or no change	\$55,000 to \$74,999
Tax examiners and collectors, and revenue agents	Bachelor's degree	Moderate-term on-the-job training	Declining	Little or no change	\$35,000 to \$54,999
Tax preparers	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	Faster than average	\$35,000 to \$54,999
Taxi drivers and chauffeurs	No formal educational credential	Short-term on-the-job training	10,000 to 49,999	As fast as average	\$25,000 to \$34,999
Teacher assistants	Some college, no degree	None	50,000 or more	As fast as average	\$25,000 to \$34,999
Teachers and instructors, all other	Bachelor's degree	None	50,000 or more	Faster than average	\$25,000 to \$34,999
Team assemblers	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	n/a
Technical writers	Bachelor's degree	Short-term on-the-job training	5,000 to 9,999	Faster than average	\$55,000 to \$74,999
Telecommunications equipment installers and repairers, except line installers	Postsecondary nondegree award	Moderate-term on-the-job training	Declining	Decline	\$55,000 to \$74,999
Telecommunications line installers and repairers	High school diploma or equivalent	Long-term on-the-job training	1,000 to 4,999	Little or no change	\$55,000 to \$74,999
Telemarketers	No formal educational credential	Short-term on-the-job training	0 to 999	Little or no change	\$25,000 to \$34,999
Telephone operators	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Tellers	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Terrazzo workers and finishers	High school diploma or equivalent	Apprenticeship	0 to 999	Faster than average	\$35,000 to \$54,999
Textile bleaching and dyeing machine operators and tenders	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Textile cutting machine setters, operators, and tenders	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Textile knitting and weaving machine setters, operators, and tenders	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Textile winding, twisting, and drawing out machine setters, operators, and tenders	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Textile, apparel, and furnishings workers, all other	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Therapists, all other	Bachelor's degree	None	1,000 to 4,999	Much faster than average	\$35,000 to \$54,999
Tile and marble setters	No formal educational credential	Long-term on-the-job training	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Timing device assemblers and adjusters	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$25,000 to \$34,999
Tire builders	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Tire repairers and changers	High school diploma or equivalent	Short-term on-the-job training	0 to 999	Little or no change	\$25,000 to \$34,999
Title examiners, abstractors, and searchers	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Slower than average	\$35,000 to \$54,999
Tool and die makers	Postsecondary nondegree award	Long-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Tool grinders, filers, and sharpeners	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Tour guides and escorts	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Faster than average	n/a
Traffic technicians	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	As fast as average	\$35,000 to \$54,999
Training and development managers	Bachelor's degree	None	1,000 to 4,999	Faster than average	\$75,000 or more



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Training and development specialists	Bachelor's degree	None	10,000 to 49,999	Faster than average	\$55,000 to \$74,999
Transit and railroad police	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	As fast as average	\$55,000 to \$74,999
Transportation attendants, except flight attendants	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	As fast as average	\$25,000 to \$34,999
Transportation inspectors	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$55,000 to \$74,999
Transportation security screeners	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	Slower than average	\$35,000 to \$54,999
Transportation workers, all other	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	As fast as average	\$35,000 to \$54,999
Transportation, storage, and distribution managers	High school diploma or equivalent	None	5,000 to 9,999	As fast as average	\$75,000 or more
Travel agents	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Travel guides	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	As fast as average	n/a
Tree trimmers and pruners	High school diploma or equivalent	Short-term on-the-job training	5,000 to 9,999	Faster than average	\$35,000 to \$54,999
Umpires, referees, and other sports officials	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	As fast as average	\$25,000 to \$34,999
Upholsterers	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Little or no change	\$25,000 to \$34,999
Urban and regional planners	Master's degree	None	1,000 to 4,999	Faster than average	\$55,000 to \$74,999
Ushers, lobby attendants, and ticket takers	No formal educational credential	Short-term on-the-job training	5,000 to 9,999	As fast as average	Less than \$25,000
Veterinarians	Doctoral or professional degree	None	10,000 to 49,999	Much faster than average	\$75,000 or more



Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Veterinary assistants and laboratory animal caretakers	High school diploma or equivalent	Short-term on-the-job training	10,000 to 49,999	Much faster than average	\$25,000 to \$34,999
Veterinary technologists and technicians	Associate's degree	None	10,000 to 49,999	Much faster than average	\$25,000 to \$34,999
Vocational education teachers, postsecondary	Bachelor's degree	None	1,000 to 4,999	Little or no change	\$35,000 to \$54,999
Waiters and waitresses	No formal educational credential	Short-term on-the-job training	50,000 or more	As fast as average	Less than \$25,000
Watch repairers	High school diploma or equivalent	Long-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Water and wastewater treatment plant and system operators	High school diploma or equivalent	Long-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Web developers	Associate's degree	None	10,000 to 49,999	Much faster than average	\$55,000 to \$74,999
Weighers, measurers, checkers, and samplers, recordkeeping	High school diploma or equivalent	Short-term on-the-job training	1,000 to 4,999	Slower than average	\$25,000 to \$34,999
Welders, cutters, solderers, and brazers	High school diploma or equivalent	Moderate-term on-the-job training	10,000 to 49,999	As fast as average	\$35,000 to \$54,999
Welding, soldering, and brazing machine setters, operators, and tenders	High school diploma or equivalent	Moderate-term on-the-job training	Declining	Decline	\$35,000 to \$54,999
Wellhead pumpers	High school diploma or equivalent	Moderate-term on-the-job training	1,000 to 4,999	Much faster than average	\$35,000 to \$54,999
Wholesale and retail buyers, except farm products	Bachelor's degree	Moderate-term on-the-job training	Declining	Decline	n/a
Wind turbine service technicians	Postsecondary nondegree award	Long-term on-the-job training	5,000 to 9,999	Much faster than average	\$35,000 to \$54,999
Woodworkers, all other	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Slower than average	\$25,000 to \$34,999
Woodworking machine setters, operators, and tenders, except sawing	High school diploma or equivalent	Moderate-term on-the-job training	0 to 999	Little or no change	\$25,000 to \$34,999
Word processors and typists	High school diploma or equivalent	Short-term on-the-job training	Declining	Decline	\$35,000 to \$54,999





Occupation	Entry-Level Education	On-The-Job Training	Projected # of New Jobs	Projected Growth Rate	2018 Median Pay
Writers and authors	Bachelor's degree	Long-term on-the-job training	10,000 to 49,999	As fast as average	\$55,000 to \$74,999
Zoologists and wildlife biologists	Bachelor's degree	None	1,000 to 4,999	As fast as average	\$55,000 to \$74,999

Source: <https://www.bls.gov/ooh/occupation-finder.htm>



## FURTHER READING

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