


Better Decisions with Better Data How BLS Can Help You

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U.S. Department of Labor/Bureau of Labor Statistics
IARP Annual Conference
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Bureau of Labor Statistics (BLS)

- Mission
 - ▶ Collect, analyze, and disseminate economic information
 - ▶ Support public and private decision-making
- AORTA – Provide products and services that are:
 - Accurate
 - Objective
 - Relevant
 - Timely
 - Accessible








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Since Last Year...

- Unemployment rate 3.7% to 3.5% 
- Jobs up 2,147,000 (+1.4%) 
- Labor force up 1,984,000 (+1.2%) 
- Average hourly earnings up 2.9% 
- Consumer prices up 1.7% 

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Source: U.S. Bureau of Labor Statistics (Sept 2019)



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Today's Agenda

- Provide information for career planning
 - ▶ Employment projections
 - ▶ Wage data by occupation and area
- Describe the new Occupational Requirements Survey (ORS)
 - ▶ Show initial estimates from first wave of data collection
 - ▶ Share what users can expect going forward
- Show you where to find all these data!

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A Stat for That...

- 19.1% of persons with a disability are employed
- 65.9% of persons with no disability are employed

- The unemployment rate for persons with a disability is 8.0%
- The unemployment rate for persons with no disability is 3.7%

- 33.7% of employed persons with a disability are in management, professional, and related occupations

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Number of Unemployed Persons Per Job Opening



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Source: BLS, Job Openings and Labor Turnover Survey, seasonally adjusted



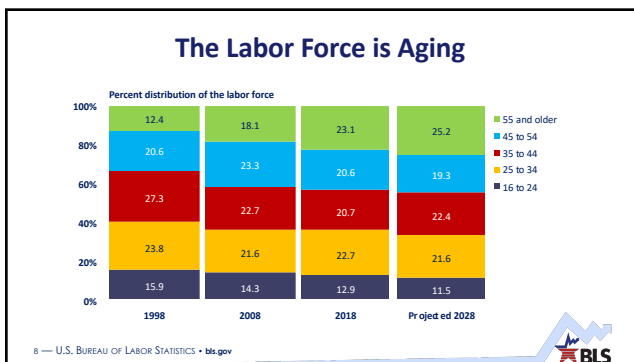
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Career Planning Resources

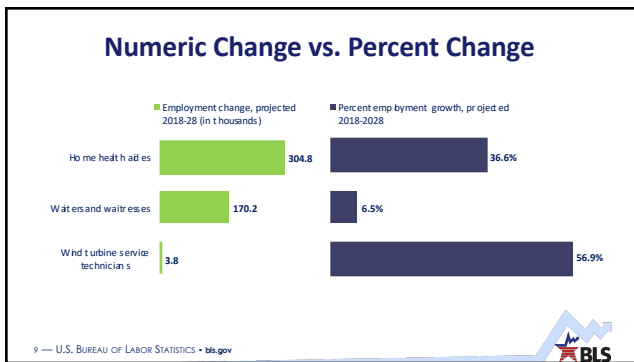
Employment Projections Wages

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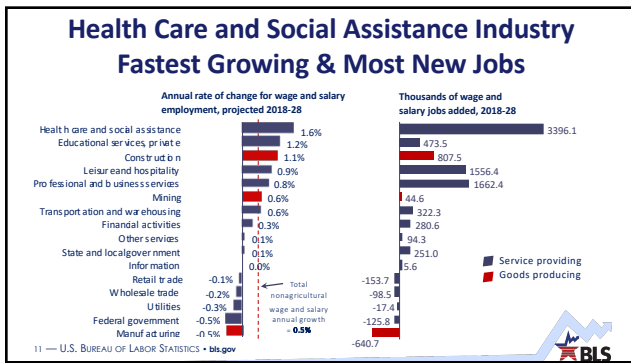
Pop Quiz

The industry sector with the largest projected numeric increase in employment nationally from 2018 to 2028 is

1. Healthcare and social assistance,
2. Professional and business services,
3. Retail trade or
4. Information.

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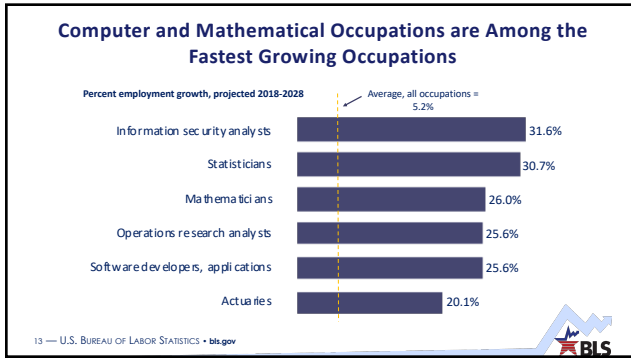
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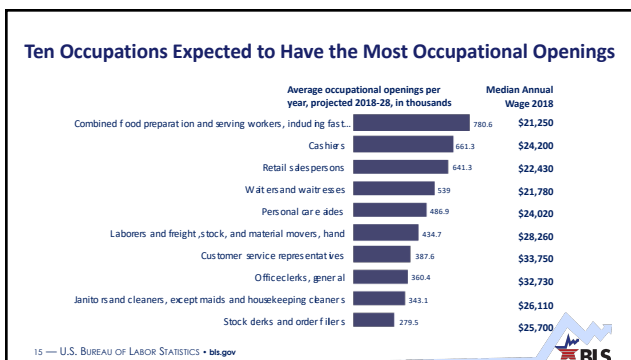
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Pop Quiz

■ Which of these occupations is projected to lose the most jobs of any occupation from 2018 to 2028?

- Postal service mail carriers
- Secretaries and administrative assistants, except legal, medical, and executive
- Tellers
- Cashiers
- Printing press operators



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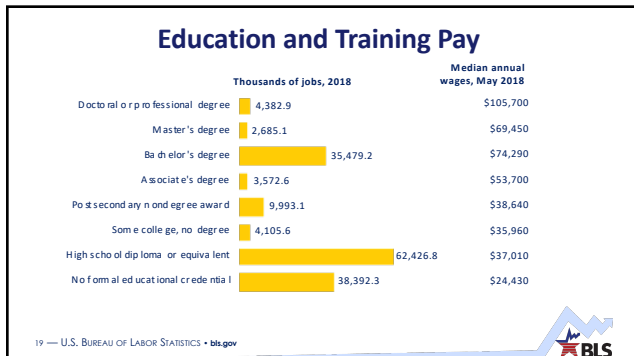
Education and Training Classification

■ Consists of three categories of information for each occupation:

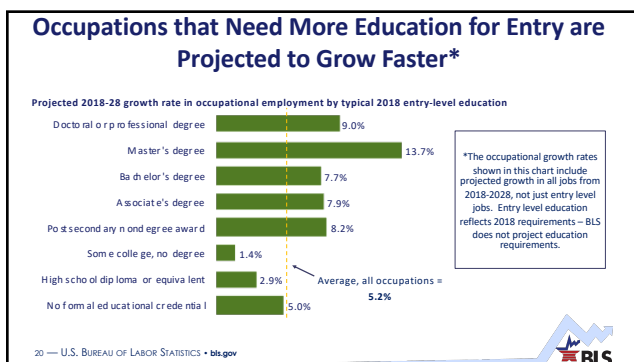
- ▶ Typical education needed for entry
- ▶ Work experience in a related occupation
- ▶ Typical on-the-job training needed to attain competency in the occupation

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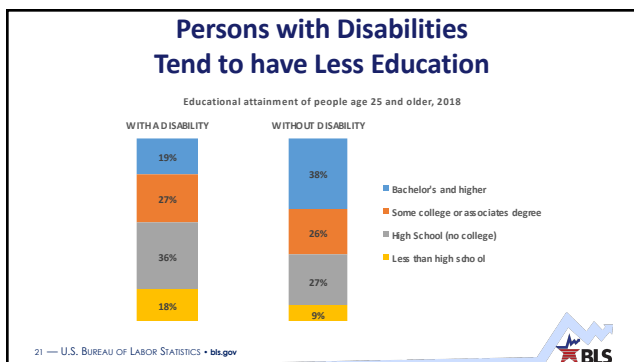
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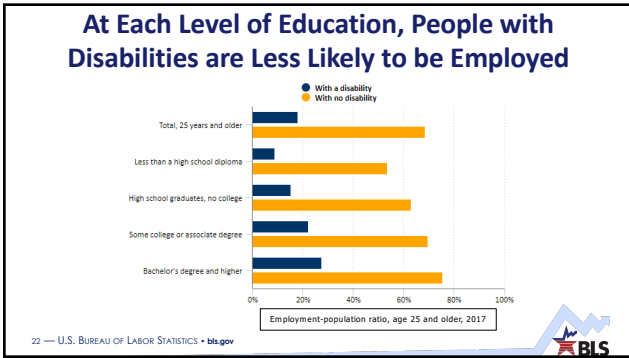
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Did you know this about education and wages?

- There are 62 occupations which have median annual wages greater than \$100,000
 - ▶ All of these 62 occupations typically need postsecondary education for entry
 - ▶ Some need additional preparation; for example:
 - The 16 management occupations require related work experience, which can be lengthy
 - Physicians and specialty dentists need an internship/residency in addition to a professional degree
- There are 139 occupations which pay more than twice (\$77,280) the median wage for all occupations (\$38,640)
 - ▶ Of these, 130 typically require postsecondary education for entry
 - ▶ The remaining nine occupations typically need a high school diploma, but also other preparation—work experience and/or on-the-job training

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Occupational Outlook Handbook

www.bls.gov/ooh

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Hot Jobs Requiring a High School Diploma

OCCUPATIONAL OUTLOOK HANDBOOK

Occupation Finder

Search: Use the drop-down menu in one or more columns to narrow your search.
Sort: Use the arrows at the top of each column to sort alphabetically or numerically.

Showing 1 to 6 of 6 entries (Filtered from 888 total entries)

OCCUPATION	ENTRY LEVEL EDUCATION	ON-THE-JOB TRAINING	PROJECTED NUMBER OF NEW JOBS	PROJECTED GROWTH RATE	2018 MEDIAN PAY
Home health aides	High school diploma or equivalent	Short-term on-the-job training	\$0,000 or more	Much faster than average	Less than \$30,000
Medical assistants	High school diploma or equivalent	Postsecondary on-the-job training	\$0,000 or more	Much faster than average	\$30,000 to \$39,999
Personal care aides	High school diploma or equivalent	Short-term on-the-job training	\$0,000 or more	Much faster than average	Less than \$30,000
Radiation, ultraviolet, and laser technicians	High school diploma or equivalent	Apprenticeship	\$0,000 or more	Much faster than average	\$40,000 to \$59,999
Retail and business services cashiers	High school diploma or equivalent	Short-term on-the-job training	\$0,000 or more	Much faster than average	\$20,000 to \$29,999
Taxi, bus, seaporters of food preparation and serving workers	High school diploma or equivalent	None	\$0,000 or more	Much faster than average	\$10,000 to \$19,999

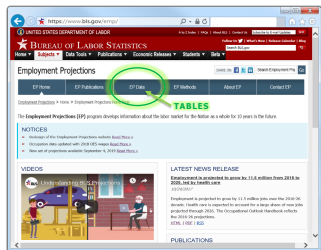
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Employment Projections Program

www.bls.gov/emp



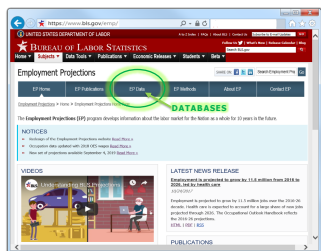
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Employment Projections Program

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Employment Projections

Filter and Sort Using the Database

Employment Projections Databases

Database Name	One Screen
Occupational Projections Data 2018 and projected 2028 employment, job openings, education, training, and wages	
National Employment Matrix - Occupation Detailed industries where each occupation is employed	
National Employment Matrix - Industry Detailed occupations employed in each industry	

- Typical entry-level education
 - Doctoral or professional degree
 - Master's degree
 - Bachelor's degree
 - Associate's degree
 - Postsecondary nondegree award
 - Some college, no degree
 - High school diploma or equivalent
 - No formal educational credential

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Most Job Openings – Filtered by Education

Occupation Title	SOC Code	Employment 2018 (thousands)	Employment 2028 (thousands)	Employment change, 2018-2028 (thousands)	Employment change, 2018-2028 (percent)	Occupational openings, 2018-2028 annual average (thousands)	2018 median annual wage	Education, work experience, and training	Typical entry-level education	Work experience in a related occupation	Typical on-the-job training
Personal care jobs											
Show/Hide Example Job Titles	89-9021	2,421.20	3,302.10	881	36.4	486.9	\$34,029	High school diploma or equivalent	None	Short-term on-the-job training	<ul style="list-style-type: none"> * Customer service representatives * Show/Hide Example Job Titles * Complaint Clerk * Contact Center Specialist * Customer * Complainant Clerk * Customer Representative * Contact Specialist
Customer service representatives											
Show/Hide Example Job Titles	43-4051	2,972.60	2,921.00	-51.6	-1.7	387.6	\$33,750	High school diploma or equivalent	None	Short-term on-the-job training	<ul style="list-style-type: none"> * Customer * Support Representative * Gas Distribution And Emergency Clerk * Passenger Relations Representative * Policyholder Information Clerk * Warranty Clerk
Office clerks, except											
Show/Hide Example Job Titles	43-9061	3,158.50	3,047.80	-110.6	-3.5	360.4	\$32,730	High school diploma or equivalent	None	Short-term on-the-job training	
Stock clerks and order fillers											
Show/Hide Example Job Titles	43-5081	2,056.60	2,091.30	34.7	1.7	279.5	\$25,700	High school diploma or equivalent	None	Short-term on-the-job training	
Heavy and tractor-trailer truck drivers											
Show/Hide Example Job Titles	53-3032	1,958.80	2,058.50	99.7	5.1	238.4	\$43,680	Postsecondary nondegree award	None	Short-term on-the-job training	

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Career Outlook

www.bls.gov/careeroutlook

High-wage occupations by typical entry-level education, 2017
Find out which occupations had the highest wages at different education levels.

- High-wage occupations by typical entry-level education, 2017, January 2019
- Careers for people who are creative, December 2018
- Employment growth and wages in e-commerce, December 2018

Interview with a ...

- Baselard, January 2019
- Landis, April 2019
- Chemistry teacher, January 2019
- Teacher of the deaf, October 2018
- Bicycle routes, May 2018

You're a what?
Director of accelerated undergraduate programs

College, interrupted? Janese Peters helps students whose plans were derailed to complete their degree.

- Director of accelerated undergraduate programs, September 2019
- CAU, December, May 2019
- Biotech technician, October 2018
- Emotional support, May 2018
- Chiefs file, November, April 2018

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State Employment Projections
www.projectionscentral.com

Home Long-term Projections (2018-2028) Short-term Projections (2018-2020) Projection Sites Related Sites About the PMP Projection Process Separators Communications

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All About Demographics
www.bls.gov/cps/demographics.htm
www.bls.gov/gps

Age
Race
Ethnicity
Gender
Marital Status
Educational Attainment

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Career Planning Resources

Employment Projections
Wages

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Wage Administration
Occupational Employment Statistics (OES)
www.bls.gov/oes

What's the average pay for accountants and auditors? How about the range and growth potential?



How do wages compare among areas?

Do wages vary by industry for the same occupation?

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OES: What's Available

- Data by detailed occupation
- Data by industry
- National industry profile of occupation
- Occupational geographic profile

Standard Occupational Code Example

- Major group: 41-0000 Sales and related occupations
- Minor group: 41-2000 Retail sales workers
- Broad occupation: 41-2020 Counter and rental clerks and parts salespersons
- Detailed occupations:
 - 41-2021 Counter and rental clerks
 - 41-2022 Parts salespersons

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Uses of OES data

- Employment Projections
- Salary Negotiation
 - ▶ For job seekers: Comparing pay for the same occupation among different industries and comparing pay in different occupations
 - ▶ For employers, to determine salary ranges for different occupations in different locations and in different industries
 - ▶ Estimate wages by level of experience using percentile data
- Employment and Training Administration
 - ▶ Foreign Labor Certification and Prevailing Wage Determination
- Vocational Counseling and Planning
- Market Analysis

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How are wages defined?

Included

- Base rate
- Cost-of-living allowances
- Guaranteed pay
- Hazardous-duty pay
- Incentive pay (commissions, production bonuses, tips)

Excluded

- Back pay
- Jury duty
- Overtime
- Severance pay
- Shift differentials
- Nonproduction bonuses
- Tuition reimbursements

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The Stats...

Kansas City, MO-KS May 2018							
Occupation	Employment	Hourly mean wage	Hourly 10th percentile wage	Hourly 25th percentile wage	Hourly median wage	Hourly 75th percentile wage	Hourly 90th percentile wage
Computer Systems Analysts	7,270	\$38.50	\$22.96	\$28.28	\$36.70	\$46.66	\$58.20
Librarians	900	28.93	19.52	22.19	27.75	35.25	41.83
Registered Nurses	24,160	32.37	23.56	27.09	31.82	37.24	43.05
Machinists	1,530	21.48	14.84	17.29	20.85	24.77	30.03

Rehabilitation Counselors (SOC code 211015) May 2018							
Area	Employment	Hourly mean wage	Hourly 10th percentile wage	Hourly 25th percentile wage	Hourly median wage	Hourly 75th percentile wage	Hourly 90th percentile wage
Denver-Aurora-Lakewood, CO	960	\$24.73	\$13.48	\$16.10	\$23.76	\$33.52	\$37.51
Rochester, MN	130	22.82	15.04	18.06	22.77	27.39	31.36
Kansas City, MO-KS	560	19.42	13.72	15.88	18.12	22.10	28.23
Orlando-Kissimmee-Sanford, FL	300	18.38	12.94	14.63	17.46	20.42	24.52

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Accountants & Auditors Research which industries pay the most

Accountants and Auditors (SOC code 132011) May 2018							
Industry	Employment	Hourly mean wage	Hourly 10th percentile wage	Hourly 25th percentile wage	Hourly median wage	Hourly 75th percentile wage	Hourly 90th percentile wage
Funds, Trusts, and Other Financial Vehicles	630	\$43.36	\$24.25	\$31.13	\$37.81	\$49.51	\$69.35
Accounting, Tax Preparation, Bookkeeping, and Payroll Services	325,930	40.25	20.47	26.35	33.96	46.67	64.87
General Medical and Surgical Hospitals	13,780	34.10	21.25	26.17	32.53	40.10	49.11
Vocational Rehabilitation Services	1,830	29.17	19.37	22.38	27.59	34.44	41.63
Traveler Accommodation	8,300	29.13	15.17	20.65	27.39	35.81	45.49

SOC code: Standard Occupational Classification code - see <http://www.bls.gov/soc/home.htm>

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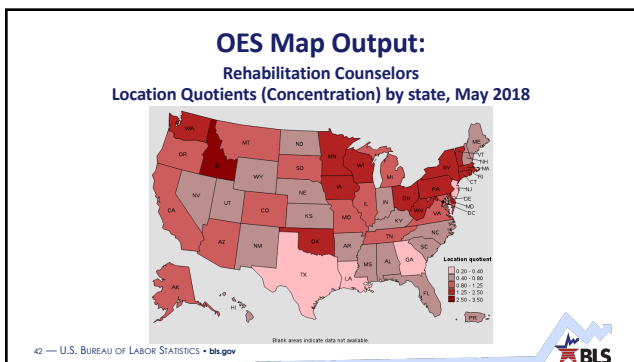
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Accessing the Data www.bls.gov/oes

Occupational Employment Statistics

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More Wages: Modeled Wage Estimates www.bls.gov/mwe

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Average hourly wages for sales and related occupations in Kansas City, 2018

Job characteristic	Average hourly wage	Relative standard error
Bargaining status		
Union	\$17.50	9.1
Nonunion	\$20.62	2.0
Basis of pay		
Time	\$16.92	2.4
Incentive	\$39.14	3.1
Work status		
Full-time	\$26.85	2.0
Part-time	\$10.87	5.0

Occupational and area wages by job characteristics such as bargaining status, work status, and work level.

Average hourly wages for computer and mathematical occupations, Kansas City, MO-KS, 2018

Level	Average hourly wage
Level 06	\$20
Level 07	\$30
Level 08	\$35
Level 09	\$38
Level 10	\$40
Level 11	\$45
Level 12	\$55

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Wage Adjustment

www.bls.gov/eci
www.bls.gov/cpi

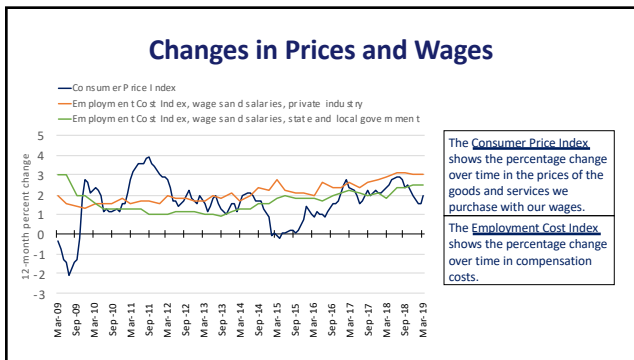


How do we know if annual wage increases are keeping pace with inflation in prices?

How much are wage and salary costs increasing for employers?

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Career Planning Resources

National Employment Projections: www.bls.gov/emp
 State & Local Projections: www.projectionscentral.com
 Occupational Outlook Handbook: www.bls.gov/ooh
 Career Outlook Online Magazine: www.bls.gov/careeroutlook
 Wages by area or industry: www.bls.gov/oes
 Wages by area and job characteristics: www.bls.gov/mwe
 Wage Adjustment-Consumer Prices: www.bls.gov/cpi
 Wage Adjustment-Employment Costs: www.bls.gov/eci

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Questions?

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Occupational Requirements Survey

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Occupational Requirements Survey

- Collected for Social Security Administration
 - ▶ Major component of OIS
- Elements include
 - ▶ Physical requirements
 - ▶ Specific vocational preparation
 - ▶ Environmental conditions
 - ▶ Mental/cognitive requirements
- Produced for detailed occupations



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Pop Quiz

■ In 2018, what percent of jobs, at a minimum, required only a high school diploma or less formal education?

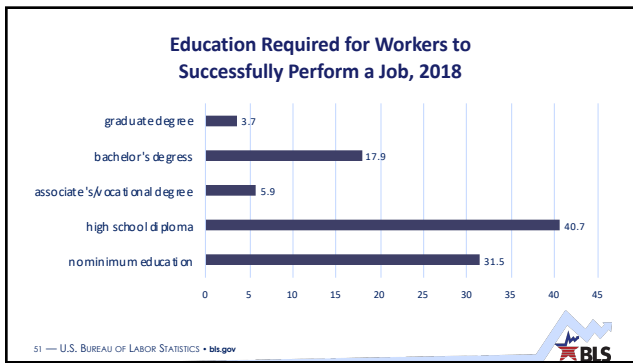
- A. About 30%
- B. About 50%
- C. About 70%
- D. About 90%



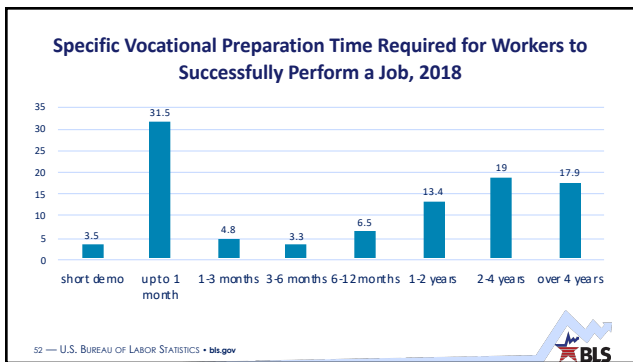
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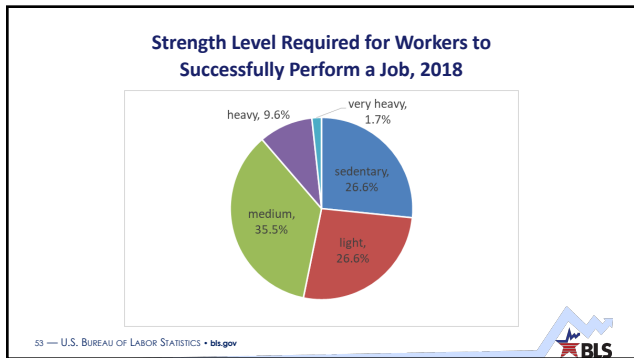
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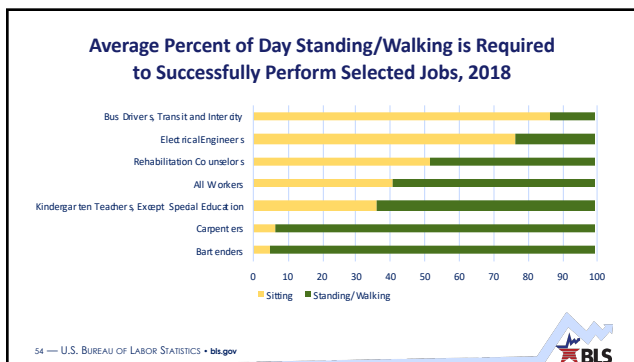
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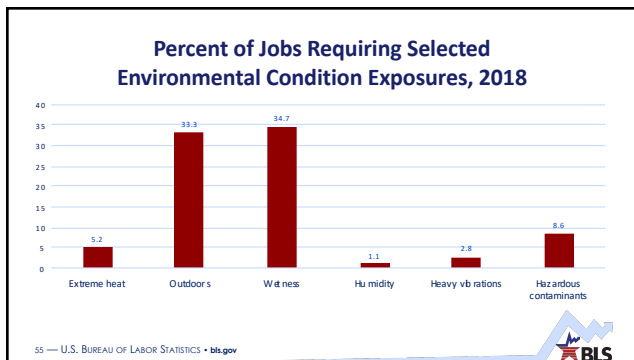
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Cognitive Elements


<p><u>Work Review</u></p> <ul style="list-style-type: none"> • Frequency of Work Being Checked • Presence of Supervisor <p><u>Problem Solving</u></p>	<p><u>Pace</u></p> <ul style="list-style-type: none"> • Control of Workload • Work Pace • Pause Control <p><u>Personal Contacts</u></p> <ul style="list-style-type: none"> • Verbal Interactions • People Skills 	<p><u>Interactions</u></p> <ul style="list-style-type: none"> • Working with the General Public • Working around Crowds • Telework
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Work Review

- Frequency of Work Being Checked
- Presence of Supervisor



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Pace

- Control of Workload
- Work Pace
- Pause Control



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Personal Contacts

- Verbal Interactions
- People Skills

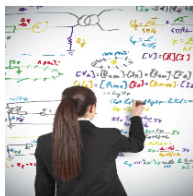


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Problem Solving



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Interactions

- Working with the General Public
- Working around Crowds
- Telework



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Accessing the Estimates

www.bls.gov/ors



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Accessing the Estimates

Database Name	Special Notice	Top Picks	Data Finder	One Screen	Multi-Screen	Tables	Text Files
Occupational Requirements Survey							



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Accessing the Estimates: One Screen Data Search

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Accessing the Estimates: Multi-Screen Data Search

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Accessing the Estimates: Excel Dataset

- Excel spreadsheet
- Contains all estimates
- Sortable by occupation, SOC code, category, requirement, etc.

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Accessing the Estimates: Occupation Profiles

Librarians work in a variety of settings including educational institutions, museums, corporations, government agencies, law firms, non-profit organizations, healthcare providers and libraries. Librarians' tasks may include selecting, cataloging, classifying, and maintaining library materials. They furnish reference, bibliographical, and readers' advisory services. They may perform in-depth, strategic research, and filter information. They may also set up or work with database and information systems to catalogue and access information.

Survey: Occupational Profiles Requirements Survey

Requirements	Estimate
Reaching overhead	39.9%
Static knee intensity level	34.2%
Master's degree	52.7%

Job requirements for librarians, 2018

Physical requirements

A light strength level is required for 63.4 percent of workers. Workers carry an average maximum weight of about 13 pounds. Most workers (88.1 percent) are not required to climb ladders, ropes, or scaffolds, climb ramps or stairs (83.0 percent), or crouch (83.3 percent). Reaching at or below the shoulder is required for 96.3 percent of workers and reaching overhead is required for 39.9 percent of workers. Stepping is required for 21.2 percent of workers. Pushing and pulling with hands and arms are not required for 76.9 percent of workers. Kneeling was not required for 75.3 percent of workers.

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Questions?

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How can you help?

- Use BLS data
 - ▶ Wages, benefits, injuries, prices, careers...
 - ▶ Visit BLS.gov, sign up for tweets, call us, etc.
- Promote high response rates from your employer, business associates and others
- Give us feedback
 - ▶ As respondents—to reduce burden
 - ▶ As users—to improve products and accessibility
- Speak up for national statistics
 - ▶ Trustworthy
 - ▶ Needed

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Voluntary Cooperation

- Nearly all of our surveys are voluntary.
- Confidentiality is as important to the Bureau as it is to respondents.
- We do our best to reduce respondent burden.
- Without the cooperation of the people who participate in its surveys—people like you—the Bureau of Labor Statistics could not provide high-quality information about the economy to you.
- We greatly appreciate the cooperation of our survey respondents.

THANK YOU!!!

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