

Vermont Department of Labor Economic and Labor Market Information 2016-2026 Long Term Occupational Projections



Aug. 2018
online at VTLMI.info

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, or ownership. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.

Figures and Tables

Figure 1. Annual Openings by Major Occupational Groups, growth and replacements

Figure 2. Percent Change in Employment by Major Occupational Groups, Vermont and U.S.

Figure 3. Top 25 Occupations by Annual Openings, growth and replacements

Figure 4. Top 25 Occupations by Rate of Growth, with educational requirements

Table 1. Summary of Occupations by Education Level Typically Required for Entry

Figure 5. Share of Vermont Employment in 2016 by Minimum Education Level Required for the Occupation

Table 2. Top 25 Occupations by Education Requirements, Most Openings and Fastest Growing

Vermont 2016-2026 Long Term Occupational Projections

The unemployment rate in Vermont is near historical lows, averaging 3.0% for 2017. Employers are having a hard time finding workers and some jobs may go unfilled. At the same time, a disproportionate share of workers is leaving the labor force as the Baby Boom generation retires. Younger workers may come in from out of state to fill many of the vacancies and somewhat offset the age-related decline in the workforce but in any case, population growth will likely be minimal. The state is projected to have an average of 41,528 openings per year in over 500 occupations.

Long Term Occupational Projections estimate where growth in employment will occur based on fundamental changes in the economy of the state; national and international trends; technological change; and other factors. Long Term Projections do not account for temporary downturns caused by business cycles. Population growth for Vermont is expected to be nearly flat, which dampens job growth. Occupational Projections measure jobs and one worker may hold more than one. As measured by the Census Bureau, Vermont has a higher rate of multiple jobholders than the U.S. In 2015, the Vermont rate was 7.2% compared to the U.S. at 4.9% of the labor force.

Projections reflect anticipated changes in the mix of occupations as the economy grows and evolves, but one thing the projections do not account for is new and emerging occupations. Only jobs that already exist in sufficient numbers to be coded and counted can be projected. It is partly through collecting new job titles and duties from employers for the data used in projections that new occupations are identified for inclusion. Also please note that the results provide a general guide for the direction and relative strength of occupational demand and are *not intended to indicate absolute levels of employment in an occupation*.

New Separations Methodology

The Projections methodology has been updated to more accurately capture the way workers change jobs over the course of their careers. Workers once entered the labor force at a young age, working until retirement in the same occupation. New, younger workers would replace them once they retired. Workers today are more likely to

work in a number of occupations during their lifetimes. The Separations methodology accounts for this workforce trend, capturing reasons workers leave an occupation other than retirement, such as changing careers, being promoted into management, or completing a retraining program.

The difference between Replacements and Separations

Replacements

The Replacements methodology primarily captured workers who took a once-traditional career path – staying in the same industry/occupation until retirement.

Projections derived from the Replacements methodology were not inaccurate. The older methodology mostly reflected retirements and death as reasons for leaving the workforce.

Separations

The Separations methodology accounts for different types of job changes to ensure the data reflects today's dynamic workforce.

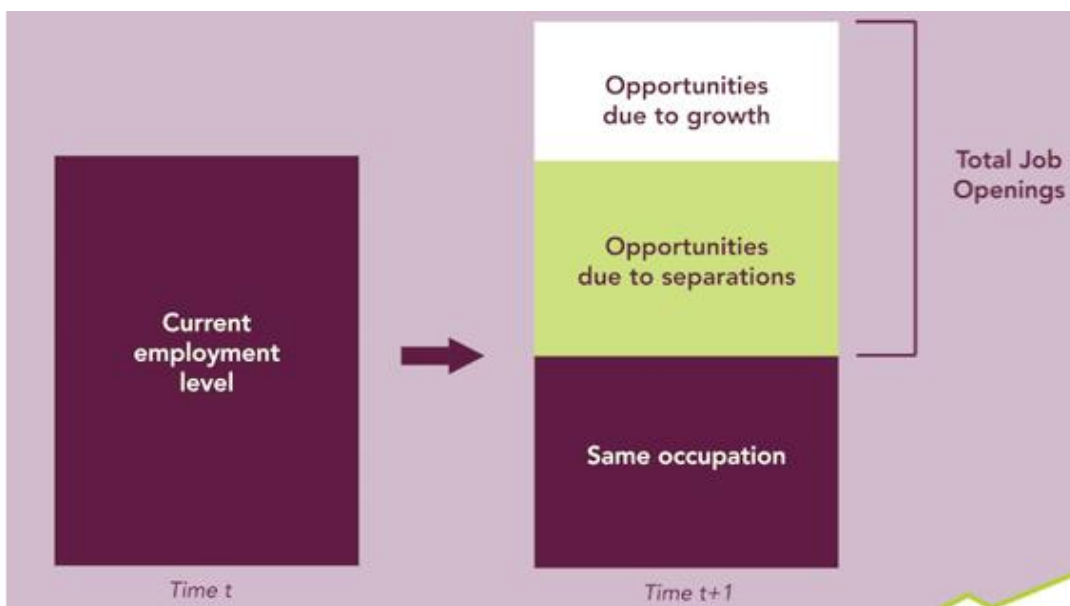
Some occupations will have very different projections because of the new methodology.

The Separations methodology includes occupational transfers, or when a worker leaves an occupation to enter a different occupation, in addition to when a worker leaves the labor force entirely.

TOTAL JOB OPENINGS

Growth and separations

Why employment openings occur in an occupation:



Projections are to be used for relative comparisons for occupations, and to help inform where training for the future workforce should be focused based on trends. Projections from the Replacements methodology should not be compared with projections derived from the Separations methodology. Any past projections become outdated when actual employment catches up with them or new projections are released, and are no longer an accurate representation of the workforce.

For more information about the Separations methodology, visit: www.bls.gov/emp/ep_separations.htm.

Figure 1 Ranks the Major Occupational groups by number of annual openings. It shows openings due to both separations and growth. The Food Preparation and Serving, Sales, and Office Support occupations have the largest number of openings. The Personal Care and Service group has the largest percent change in openings in Vermont.

Figure 1

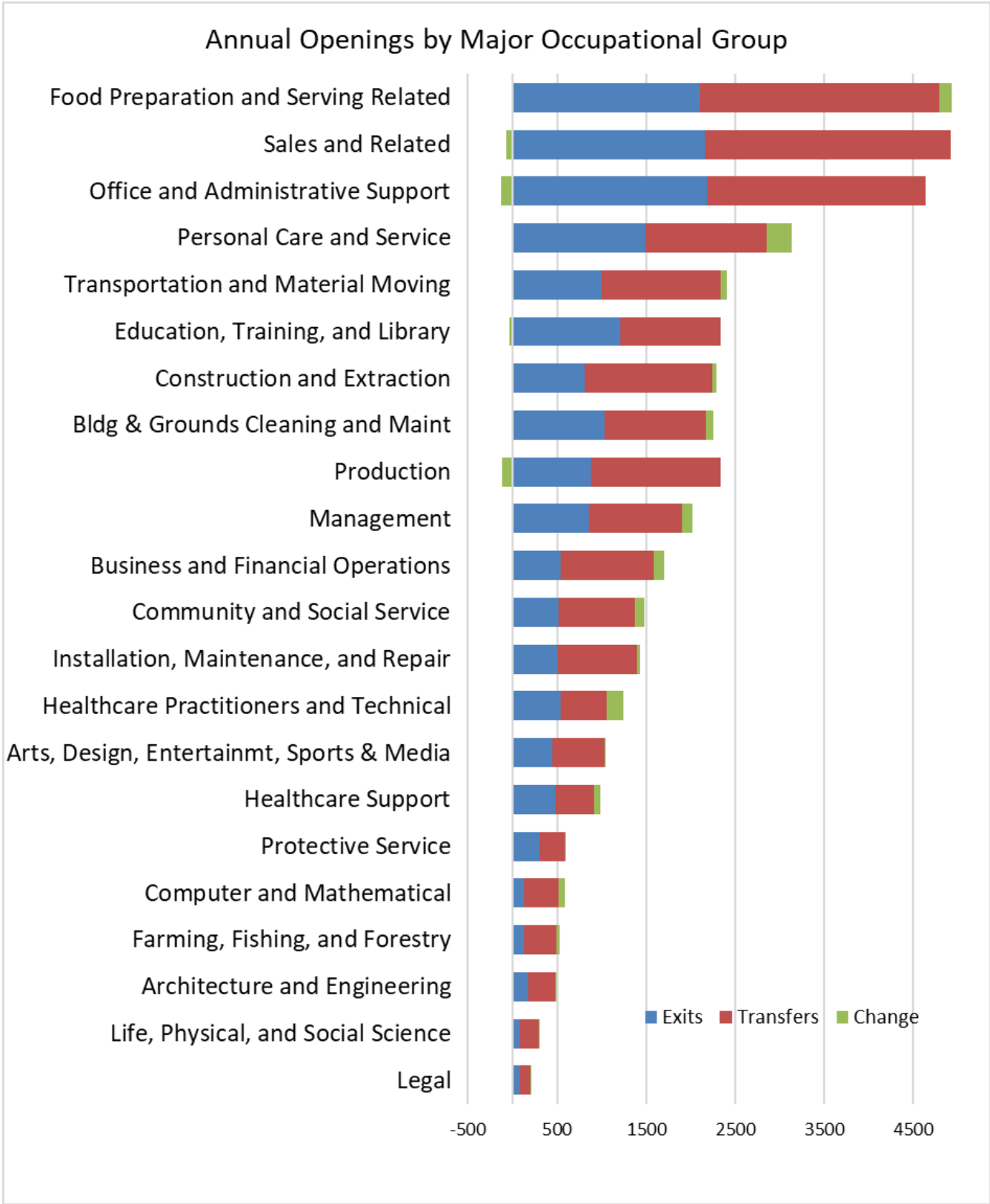
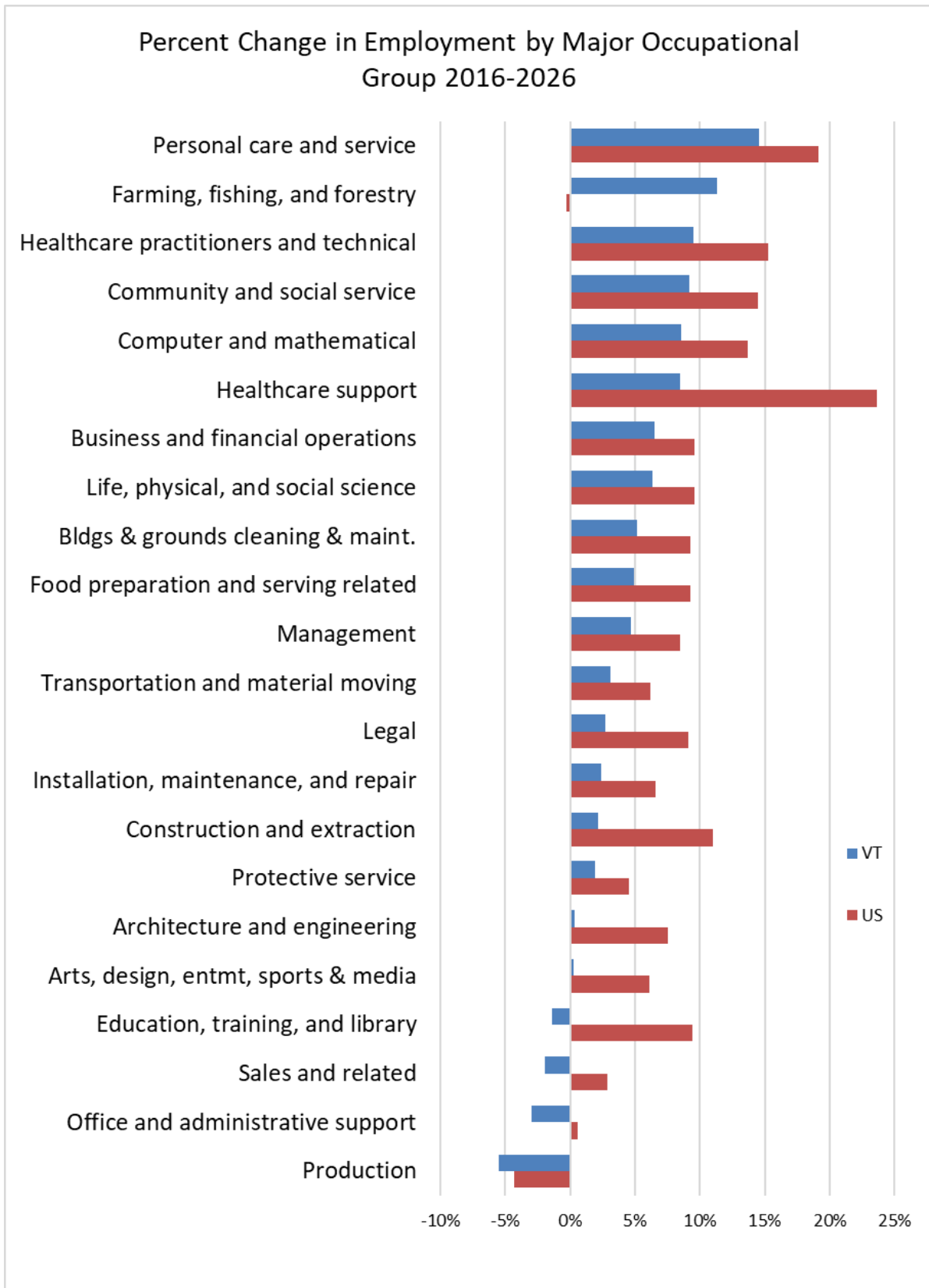


Figure 2 compares percent change in employment in Vermont to the U.S. by Major Occupational Group. The Personal Care and Service group has the largest percent change in openings in Vermont.

Figure 2



The top twenty five occupations by number of openings appear in Figure 3. Different colors represent the educational requirements typically needed to enter the occupation, at a minimum. In a competitive labor market, additional education may be necessary to get hired. Also, individual employers may specify higher levels of education for their positions. For most jobs, the majority of openings come from separations (exits + transfers). In the case of Cashiers, the occupation with the most openings, all openings are due to separations. Growth (orange portion) is actually negative.

Figure 3

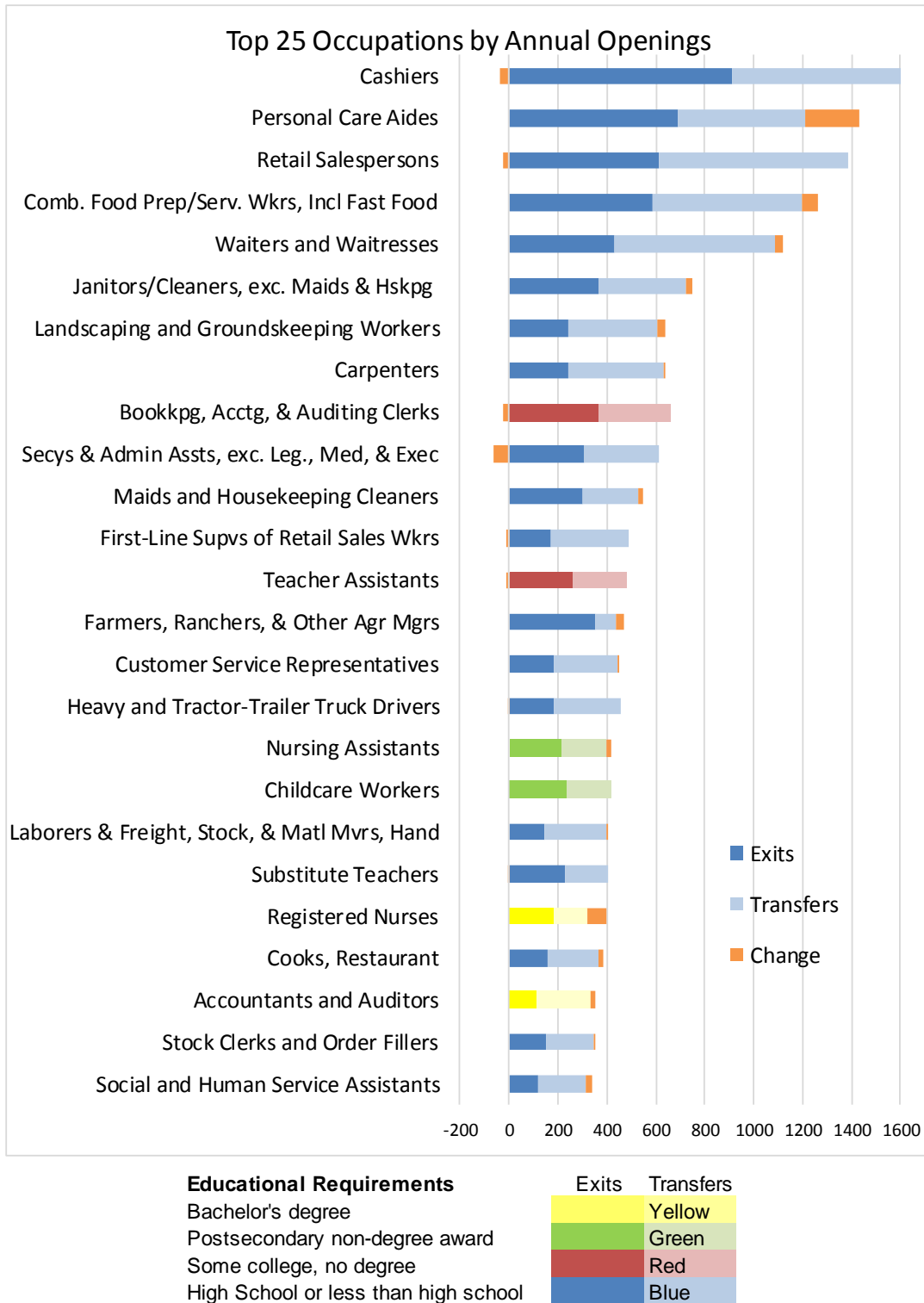
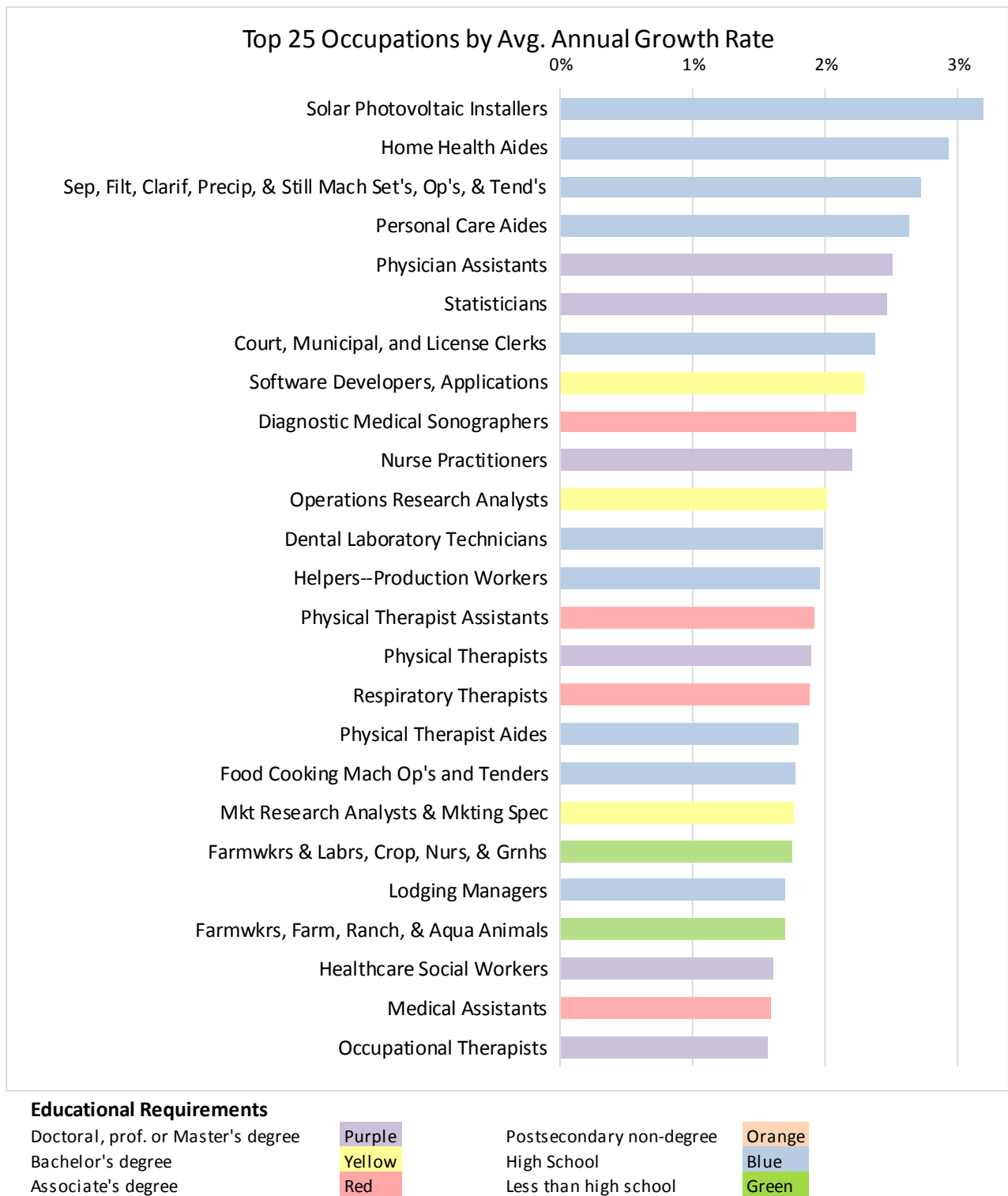


Figure 4 contains the top twenty five occupations by rate of growth. Colors indicate the level of education typically required for entry. Many of the fastest growing occupations are in health care.

Figure 4



Results in the next section are grouped by the education level usually required for entry into the occupation. Higher levels of education largely correlate with increased wages. Roughly two thirds of all jobs may not require a postsecondary degree or award.

Occupational Projections and Wages, by Educational Level, Vermont, 2016-2026

Table 1

Typical Education Level for Entry	% Share of Employment 2016	Change in Employment 2016-2026	% Change in Employment 2016-2026	Annual Openings 2016-2026	Median Annual Occupational Wage, 2017
Professional Degree	6%	1,245	5.7%	1,550	\$75,790
Bachelor's Degree	20%	3,449	4.7%	6,296	\$66,420
Associate's Degree	3%	357	3.8%	811	\$56,600
Postsecondary Non-degree Award	6%	556	2.4%	2,370	\$38,800
Some College, No Degree	3%	-249	-2.0%	1,217	\$39,910
High School	40%	2,667	1.8%	16,423	\$38,800
Less Than High School	23%	2,367	2.8%	12,833	\$25,490
Total	100%	10,392	2.8%	41,500	\$38,640

Figure 5

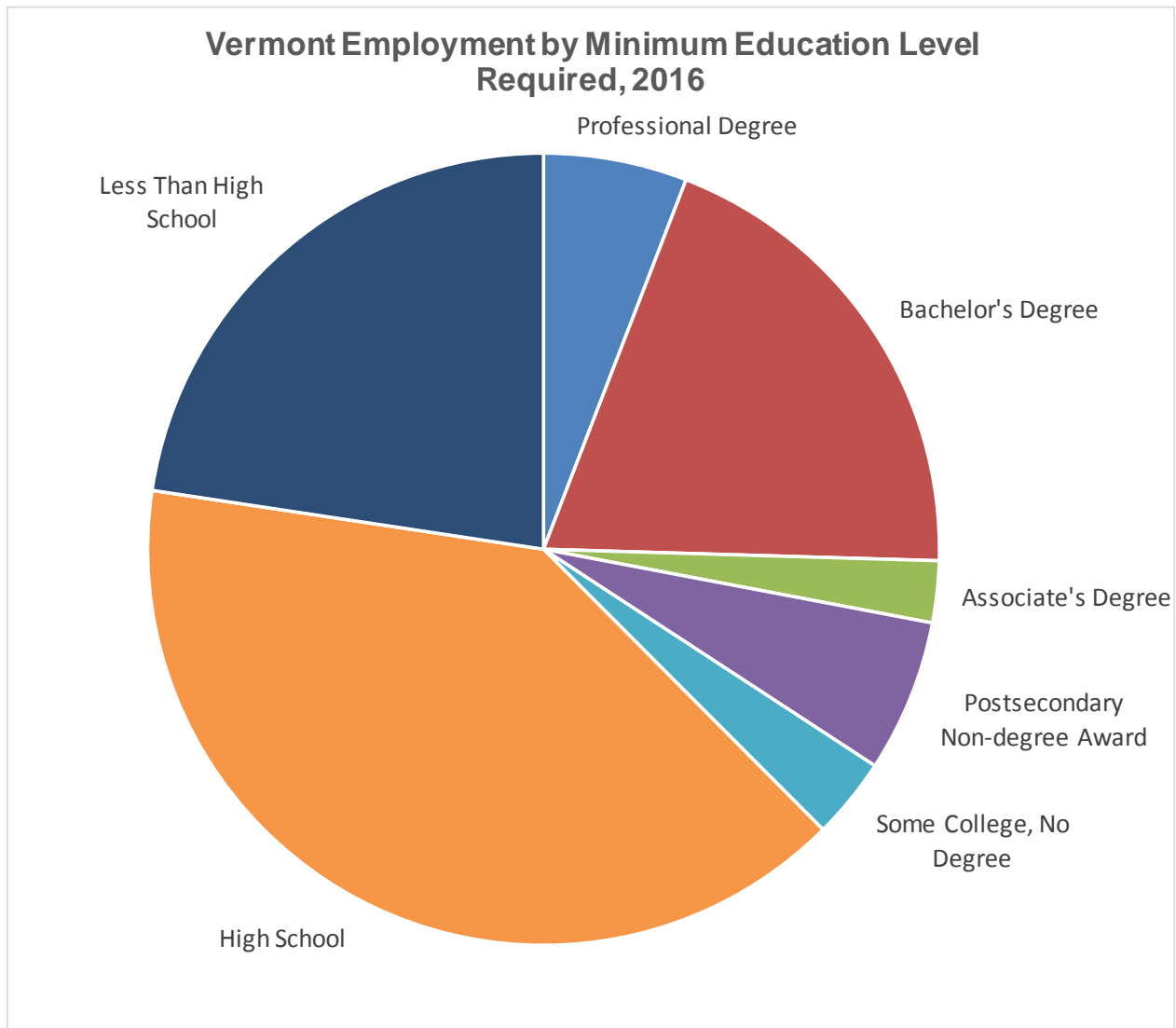


Table 2

On the following pages, Table 2 shows the top twenty five occupations at each level of educational attainment typical for entry, ranked by the number of openings and by rate of growth.

Professional Degree Most Openings	Growth	Openings	Med. Wage
Mental Health and Substance Abuse Social Workers	1.2%	130	18.13
Mental Health Counselors	1.4%	107	na
Educational, Guidance, School, and Vocational Counselors	0.4%	88	22.95
Lawyers	0.1%	83	44.60
Rehabilitation Counselors	1.3%	79	21.60
Librarians	-0.2%	66	20.75
Education Administrators, Elementary and Secondary School	-0.3%	61	na
Physical Therapists	1.9%	59	36.44
Instructional Coordinators	0.3%	58	23
Healthcare Social Workers	1.6%	57	26.39
Clinical, Counseling, and School Psychologists	0.5%	55	31.33
Nurse Practitioners	2.2%	43	48.51
English Language and Literature Teachers, Postsecondary	-0.2%	40	na
Physicians and Surgeons, All Other	0.3%	36	100.00+
Education Administrators, Postsecondary	-0.1%	29	31.70
Physician Assistants	2.5%	28	48.11
Art, Drama, and Music Teachers, Postsecondary	0.0%	26	na
Pharmacists	0.3%	24	66.93
Occupational Therapists	1.6%	23	37.54
Speech-Language Pathologists	0.3%	22	34.43
Postsecondary Teachers, All Other	-0.2%	21	na
Foreign Language and Literature Teachers, Postsecondary	0.0%	20	na
Biological Science Teachers, Postsecondary	0.3%	19	na
Urban and Regional Planners	0.7%	16	24
Health Diagnosing and Treating Practitioners, All Other	0.8%	16	34.07

Professional Degree Fastest Growth	Growth	Openings	Med. Wage
Physician Assistants	2.5%	28	48.11
Statisticians	2.5%	4	33.24
Nurse Practitioners	2.2%	43	48.51
Physical Therapists	1.9%	59	36.44
Healthcare Social Workers	1.6%	57	26.39
Occupational Therapists	1.6%	23	37.54
Mental Health Counselors	1.4%	107	na
Rehabilitation Counselors	1.3%	79	21.60
Health Specialties Teachers, Postsecondary	1.3%	9	na
Mental Health and Substance Abuse Social Workers	1.2%	130	18.13
Nurse Midwives	1.0%	3	43.49
Curators	0.9%	5	26.84
Veterinarians	0.9%	14	46
Health Diagnosing and Treating Practitioners, All Other	0.8%	16	34.07
Urban and Regional Planners	0.7%	16	24
Archivists	0.7%	4	na
Business Teachers, Postsecondary	0.6%	15	na
Clinical, Counseling, and School Psychologists	0.5%	55	31.33
Dentists, General	0.5%	9	74.77
Educational, Guidance, School, and Vocational Counselors	0.4%	88	22.95
Optometrists	0.3%	4	na
Biological Science Teachers, Postsecondary	0.3%	19	na
Pharmacists	0.3%	24	66.93
Physicians and Surgeons, All Other	0.3%	36	100.00+
Instructional Coordinators	0.3%	58	23.42

*Med. Wage is median hourly wage from May 2017 Occupational Employment and Wage estimates

Bachelor's Degree Most Openings	Growth	Openings	Med. Wage
Registered Nurses	1.1%	229	30.18
Accountants and Auditors	0.8%	116	31.23
Managers, All Other	0.6%	96	48.72
General and Operations Managers	0.5%	88	45.47
Secondary School Teachers, Except Special & Career/Technical Educ	-0.1%	71	na
Elementary School Teachers, Except Special Education	-0.1%	66	na
Coaches and Scouts	0.4%	61	na
Compliance Officers	1.0%	56	30.25
Market Research Analysts and Marketing Specialists	2.0%	54	23.76
Child, Family, and School Social Workers	0.6%	44	18.66
Management Analysts	1.5%	30	37.76
Network and Computer Systems Administrators	0.6%	30	34.97
Medical and Health Services Managers	1.3%	30	40.53
Construction Managers	0.6%	28	39.97
Software Developers, Applications	1.6%	26	37.31
Human Resources Specialists	0.4%	26	26.86
Middle School Teachers, Except Special & Career/Technical Educ	-0.1%	26	na
Training and Development Specialists	0.4%	26	26.03
Graphic Designers	0.2%	25	19.50
Civil Engineers	0.7%	25	33.98
Mental Health and Substance Abuse Social Workers	1.0%	23	18.75
Software Developers, Systems Software	2.3%	22	46.62
Financial Managers	0.5%	22	51.03
Personal Financial Advisors	1.6%	20	26.43
Social and Community Service Managers	0.6%	20	31.52

Bachelor's Degree Fastest Growth	Growth	Openings	Med. Wage
Operations Research Analysts	2.9%	3	34.90
Software Developers, Systems Software	2.3%	22	46.62
Computer Systems Analysts	2.1%	14	34.35
Market Research Analysts and Marketing Specialists	2.0%	54	23.76
Cartographers and Photogrammetrists	1.9%	2	25.11
Interpreters and Translators	1.8%	6	18.36
Personal Financial Advisors	1.6%	20	26.43
Conservation Scientists	1.6%	7	25.29
Sales Representatives, Wholesale & Manufacturing, Tech & Sci Prods	1.6%	17	39.33
Software Developers, Applications	1.6%	26	37.31
Food Scientists and Technologists	1.5%	7	28.12
Actuaries	1.5%	3	na
Management Analysts	1.5%	30	37.76
Marketing Managers	1.4%	18	51.60
Hydrologists	1.4%	2	36.60
Dietitians and Nutritionists	1.4%	3	na
Biological Technicians	1.3%	5	19.57
Environmental Engineers	1.3%	6	32.51
Chemists	1.3%	5	28.05
Medical and Health Services Managers	1.3%	30	40.53
Technical Writers	1.3%	3	27.48
Social Workers, All Other	1.2%	3	30.97
Information Security Analysts	1.2%	2	35.60
Substance Abuse and Behavioral Disorder Counselors	1.2%	7	24.11
Athletic Trainers	1.2%	5	na

Some College** Most Openings	Growth	Openings	Med. Wage
Bookkeeping, Accounting, and Auditing Clerks	-0.4%	634	19.19
Teacher Assistants	-0.3%	471	na
Heavy and Tractor-Trailer Truck Drivers	-0.1%	449	20.21
Nursing Assistants	0.5%	418	13.91
Automotive Service Technicians and Mechanics	0.3%	252	18.17
Hairdressers, Hairstylists, and Cosmetologists	0.3%	218	12.93
Massage Therapists	0.7%	121	23.29
Preschool Teachers, Except Special Education	0.1%	114	14.57
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	0.2%	106	23.10
Licensed Practical and Licensed Vocational Nurses	0.3%	101	23.01
Computer User Support Specialists	0.7%	102	23.25
Industrial Engineering Technicians	-0.7%	93	29.50
Medical Assistants	1.6%	86	17.05
Paralegals and Legal Assistants	0.8%	79	23.66
Library Technicians	0.0%	71	16.25
Web Developers	0.8%	71	29.39
Telecommunications Equipment Installers and Repairers, Except Line Ins	-1.8%	60	24.18
Dental Assistants	0.3%	59	21.23
Dental Hygienists	0.3%	47	33.49
Veterinary Technologists and Technicians	1.3%	39	16.40
Civil Engineering Technicians	0.6%	36	24.92
Medical Records and Health Information Technicians	1.0%	36	18.65
Emergency Medical Technicians and Paramedics	0.6%	33	16.31
Skincare Specialists	0.3%	32	14.23
Computer Network Support Specialists	0.8%	30	22.25

Some College** Fastest Growth	Growth	Openings	Med. Wage
Diagnostic Medical Sonographers	2.2%	6	36.38
Physical Therapist Assistants	1.9%	24	25.73
Respiratory Therapists	1.9%	15	29.55
Medical Assistants	1.6%	86	17.05
Occupational Therapy Assistants	1.5%	11	27.63
Environmental Science and Protection Technicians, Including Health	1.4%	12	20.14
Fire Inspectors and Investigators	1.4%	4	26.22
Veterinary Technologists and Technicians	1.3%	39	16.40
Phlebotomists	1.2%	28	16.19
Health Technologists and Technicians, All Other	1.2%	14	19.77
Cardiovascular Technologists and Technicians	1.2%	3	na
Environmental Engineering Technicians	1.1%	9	22.61
Surgical Technologists	1.1%	8	17.68
Radiologic Technologists	1.1%	27	28.48
Medical and Clinical Laboratory Technicians	1.0%	19	na
Dietetic Technicians	1.0%	3	13.95
Radiation Therapists	1.0%	2	42.75
Magnetic Resonance Imaging Technologists	1.0%	2	37.14
Medical Records and Health Information Technicians	1.0%	36	18.65
Healthcare Practitioners and Technical Workers, All Other	1.0%	5	19.55
Legal Support Workers, All Other	0.9%	10	na
Audio and Video Equipment Technicians	0.9%	11	17.34
Web Developers	0.8%	71	29.39
Paralegals and Legal Assistants	0.8%	79	23.66
Computer Network Support Specialists	0.8%	30	22.25

**Some College includes an Associate's Degree, a Postsecondary non-degree award, or Some College, No Degree.

High School Most Openings	Growth	Openings	Med. Wage
Personal Care Aides	2.6%	1,435	na
Carpenters	0.1%	637	20.22
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	-1.1%	549	16.70
First-Line Supervisors of Retail Sales Workers	-0.3%	474	21.25
Farmers, Ranchers, and Other Agricultural Managers	0.5%	468	na
Customer Service Representatives	0.2%	452	17.24
Childcare Workers	0.0%	417	12.71
Substitute Teachers	-0.2%	401	12.17
Stock Clerks and Order Fillers	0.3%	353	12.70
Social and Human Service Assistants	1.0%	339	16.17
Receptionists and Information Clerks	0.1%	334	15.21
Maintenance and Repair Workers, General	0.7%	308	18.66
First-Line Supervisors of Food Preparation and Serving Workers	0.4%	285	19.09
Light Truck or Delivery Services Drivers	0.1%	283	15.40
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	0.2%	267	27.61
Recreation Workers	0.7%	254	12.90
Fitness Trainers and Aerobics Instructors	0.6%	205	17.87
First-Line Supervisors of Office and Administrative Support Workers	0.0%	197	26.94
First-Line Supervisors of Construction Trades and Extraction Workers	0.5%	194	30.21
Office Clerks, General	-0.5%	189	15.64
Insurance Sales Agents	0.0%	184	24.75
Bus Drivers, School or Special Client	0.3%	173	17.10
First-Line Supervisors of Production and Operating Workers	-0.2%	171	28.73
Executive Secretaries and Executive Administrative Assistants	-2.2%	166	24.78
Shipping, Receiving, and Traffic Clerks	-0.3%	165	15.81

High School Fastest Growth	Growth	Openings	Med. Wage
Solar Photovoltaic Installers	3.2%	65	18.11
Home Health Aides	2.9%	94	13.49
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	2.7%	19	18.33
Personal Care Aides	2.6%	1,435	na
Court, Municipal, and License Clerks	2.4%	92	18.42
Dental Laboratory Technicians	2.0%	25	19.92
Helpers--Production Workers	2.0%	99	13.56
Physical Therapist Aides	1.8%	12	na
Food Cooking Machine Operators and Tenders	1.8%	9	14.09
Lodging Managers	1.7%	74	26.16
Septic Tank Servicers and Sewer Pipe Cleaners	1.4%	15	17.12
Nonfarm Animal Caretakers	1.4%	126	11.55
Security and Fire Alarm Systems Installers	1.3%	10	25.45
Medical Secretaries	1.3%	126	18.03
Veterinary Assistants and Laboratory Animal Caretakers	1.2%	21	14.39
Hazardous Materials Removal Workers	1.1%	17	18.70
Community Health Workers	1.1%	55	14.30
Bus Drivers, Transit and Intercity	1.1%	61	18.94
Tour Guides and Escorts	1.0%	41	na
Medical Equipment Preparers	1.0%	15	15.74
Social and Human Service Assistants	1.0%	339	16.17
Construction and Building Inspectors	1.0%	24	22.50
Healthcare Support Workers, All Other	1.0%	17	18.54
Cargo and Freight Agents	1.0%	6	17.66
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	1.0%	7	14.22

Less than High School Most Openings	Growth	Openings	Med. Wage
Cashiers	-0.4%	1,770	11.13
Retail Salespersons	-0.2%	1,366	11.97
Combined Food Preparation and Serving Workers, Including Fast Food	1.0%	1,264	11.45
Waiters and Waitresses	0.6%	1,118	14.40
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	0.5%	749	13.68
Landscaping and Groundskeeping Workers	0.6%	642	14.63
Maids and Housekeeping Cleaners	0.4%	545	11.70
Laborers and Freight, Stock, and Material Movers, Hand	0.3%	407	12.88
Cooks, Restaurant	0.7%	385	14.14
Bartenders	0.1%	324	13.58
Food Preparation Workers	0.4%	308	11.80
Construction Laborers	0.1%	268	15.98
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	0.0%	245	10.93
Dishwashers	0.0%	222	11.24
Taxi Drivers and Chauffeurs	1.1%	221	11.54
Farmworkers, Farm, Ranch, and Aquacultural Animals	1.7%	210	12.88
Dining Room and Cafeteria Attendants and Bartender Helpers	0.2%	184	11.61
Cooks, Institution and Cafeteria	0.4%	165	14.40
Painters, Construction and Maintenance	-0.3%	154	18.05
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	1.7%	145	15.24
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	0.3%	142	11.97
Counter and Rental Clerks	0.2%	120	15.15
Packers and Packagers, Hand	0.4%	120	12.32
Bakers	0.4%	111	13.81
Refuse and Recyclable Material Collectors	1.2%	100	15.33

Less than High School Fastest Growth	Growth	Openings	Med. Wage
Cooks, Institution and Cafeteria	0.4%	165	14.40
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble	0.4%	21	15.90
Bakers	0.4%	111	13.81
Food Servers, Nonrestaurant	0.4%	56	12.15
Packers and Packagers, Hand	0.4%	120	12.32
Maids and Housekeeping Cleaners	0.4%	545	11.70
Meat, Poultry, and Fish Cutters and Trimmers	0.4%	30	15.94
Food Preparation Workers	0.4%	308	11.80
Laborers and Freight, Stock, and Material Movers, Hand	0.3%	407	12.88
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	0.3%	142	11.97
Cement Masons and Concrete Finishers	0.3%	30	17.84
Industrial Truck and Tractor Operators	0.3%	98	17.54
Food Preparation and Serving Related Workers, All Other	0.3%	13	11.93
Roofers	0.2%	49	17.23
Dining Room and Cafeteria Attendants and Bartender Helpers	0.2%	184	11.61
Counter and Rental Clerks	0.2%	120	15.15
Demonstrators and Product Promoters	0.1%	15	13.32
Construction Laborers	0.1%	268	15.98
Bartenders	0.1%	324	13.58
Dishwashers	0.0%	222	11.24
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	0.0%	245	10.93
Food Processing Workers, All Other	0.0%	6	16.78
Slaughterers and Meat Packers	0.0%	5	na
Graders and Sorters, Agricultural Products	0.0%	49	11.89
Parts Salespersons	-0.1%	72	16.70