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We want to recognize and thank the Credential Count Project Team for their contributions to this report:

Project Leads:

Allison Forbes, CREC Vice President of Research, with **Andrew Reamer**, CREC Senior Research Fellow and Research Professor, George Washington Institute of Public Policy (GWIPP), George Washington University

Credential Count Research Team:

Danielle Haywood, GWIPP Graduate Assistant

Jeff Grann, Credential Solutions Lead, Credential Engine

Lee Winkler, CREC Research Analyst and Credential Count Database Manager

CREC Research Assistance: Ahoefa Ananouku, Rosa Lee, Gabe Moss, Ellen Schenk, & Jacob Stenstrom

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About Credential Engine

Credential Engine's mission is to bring transparency to all credentials, reveal the marketplace of credentials, increase credential literacy, and allow students, workers, employers, educators, and policy makers to make better informed decisions about credentials and their value.

To achieve this mission, Credential Engine aims to produce a comprehensive, reliable count of every unique credential in the United States and improve the uniformity of how all types of credentials are described so they can be searched, discovered, compared, and valued.

Since 2017, Credential Engine has diligently worked to lay bare an increasingly complex, and confusing, landscape of U.S. credentials, and to create the building blocks to make reliable and useful credential information more accessible for students, workers, and the employers who hire them. We have created a common taxonomy, or schema, through the Credential Transparency Description Language (CTDL) that allows individuals to make “apples-to-apples” comparisons between and among credentials; allowing us to map the connecting points between credentials, competencies, jobs, education, and training opportunities—the information that so many have been looking for.

The driving force behind Credential Engine's work has been a lack of clarity about what exactly is available in terms of education and training, the value of credentials in the labor market, and what enables certain individuals to benefit from those opportunities more than others. To create a credential landscape that is transparent—accessible, discoverable, understandable, and navigable—we must first understand the credential landscape. We needed a clearer picture of what we are all dealing with so that we could appropriately act to meet the challenge of full and meaningful credential transparency.

Meaningful credential transparency relies on all of us contributing to and using the information found in the national Credential Registry—an open data, open-access network for timely and trusted information about credentials across states, regions, and the entire country. Data added to the Registry uses the CTDL schema to clarify, connect, and publish the credential information for others to use. The CTDL is already regarded as the standard language through which these million unique credentials and their competencies can be connected, compared, and contrasted—from evaluating whether a credential leads to a specific career and higher wages or if it leads to a higher-level credential, enhancing economic momentum and mobility.

To learn more about Credential Engine and find ways to get involved, please visit www.credentialengine.org and/or email info@credentialengine.org.

Letter of Introduction

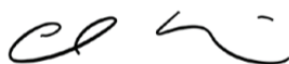
As detailed in Credential Engine's 2021 report [Counting U.S. Postsecondary and Secondary Credentials](#), there are nearly one million distinct credentials in the American marketplace. This report, *Education and Training Expenditures*, supplements those findings to add context to just how pressing the need for better credential transparency is.

Education and training providers—including education institutions, employers, and state and federal governments—spend *almost two trillion dollars* annually to ensure people have the necessary skills to meet the country's ever-changing workforce and societal demands.

Unequivocally, *expenditures on education and training are necessary* to keep up with ever-changing workforce demands. Yet it's worth asking if dollars are spent on the right credentials for the greatest value. What is the payoff to education investors: students, workers, parents, employers, the government, and providers? It is difficult to calculate a true return on investment when clear, relevant, consistent, and trustworthy credential information is clearly lacking. Two trillion dollars is nothing to take lightly. It underscores the seriousness of the credentialing marketplace while also signaling the need to create better processes for accountability and decision-making.

Credential transparency can help streamline these processes and empower more efficient and effective decision making at the individual, organizational, state, and federal levels. Credential transparency means better understanding the skills and competencies behind different credentials. It means better alignment between credentials and workforce needs. Credential transparency facilitates understanding of local and national opportunities for those seeking the credentials and competencies they need to enter the workforce, find a better job, or advance in their current place of employment. All of which are opportunities with long-term implications as the country works to recover from the COVID-19 pandemic.

As you read this report, we hope these data motivate action: that you contribute credential data into the [Credential Registry](#) so that we can all use it to make better informed decisions, open pathways to real and equitable opportunity, and aid in our collective recovery.



Eleni Papadakis

Board Chair
Credential Engine

Executive Director
Washington State Workforce Training
and Education Coordinating Board



Scott Cheney

Chief Executive Officer
Credential Engine

Executive Summary

Learners, educators, employers, and policymakers understand that expenditures on education and training are necessary to develop the skills and talent required by today and tomorrow's workforce. However, until today we did not have a robust understanding of exactly how much is being spent on acquiring these necessary skills and credentials.

This report provides an estimate of U.S. spending on training and education in 2017. The total expenditures by educational institutions, employers, federal grant programs, states, and the military were **\$1.921 trillion**. From this nearly two trillion dollars in expenditures:

- Educational institutions spent **\$1,325 billion** on educational activities, almost 70 percent of total spending in the U.S.
- Employers spent **\$516 billion** (27 percent of total) on training and training wages.
- States and federal grants to other schools, programs, and the military account for the remaining **\$79 billion** (four percent of total).

All of this spending is ostensibly oriented toward ensuring that individuals being served by education and training opportunities earn the credentials and competencies which have value to them in some way. Given that these expenditures are significant for all involved—not to mention the millions of learners incurring debt—we should all be working towards a system that allows us to make the best use of these resources. Our 2021 report, [*Counting U.S. Postsecondary and Secondary Credentials*](#), shows us there are one million credentials in the U.S. alone. Credential transparency can help align our efforts across education and training to provide more efficient and effective pathways to and through these education and training opportunities.

To provide confidence in this \$1.921 trillion figure, we offer in this report a detailed overview of the methods used to gather data across nine distinct categories.

Findings

For this report, we analyzed the total education and training expenditures spent by educational institutions, employers, federal grant programs, states, and the military across the United States in 2017. We estimate the total education and training expenditures across these sectors were **\$1.921 trillion**.

In our accounting, we aimed to reduce double counting, but it is difficult to know the extent to which employers spend on educational institutions and other providers. Our methods are clearly documented in this report so that others may evaluate our assumptions. Data was available across 9 categories and we discuss methods and results for each of these categories in the following pages.

Most of the information on spending is drawn from administrative reporting by institutions to the federal government. These administrative data sources allow us to provide “enumerations,” or complete accounts of spending. For three categories, we provide rough estimates (non-Title IV degree-granting institutions, employer-sponsored training direct expenditures and training wages), based on extrapolations of small-sample survey results.

Table 1 offers an overview of the findings and methods used to gather and analyze data across the different categories. One category—Private Education and Training Organizations (Non-Degree)—is further divided into two sections of analyses to distinguish between expenditures from organizations that are private nonprofits and for-profits that grant only certificates and those that offer educational support services.

Educational Institutions

Category total = \$1,325.5 billion

Elementary and Secondary Education (K-12)

- **Amount:** \$789.0 billion
- **Coverage:** Total expenditures for all public and private elementary and secondary schools.
- **Time Period:** School year 2017-18

Data Sources and Methods: Data obtained from Table 106.20, [2018 Digest of Education Statistics](#), National Center for Education Statistics (NCES), U.S. Department of Education.

NCES obtains public school system expenditures (\$726.0 billion) through the annual [National Public Education Finance Survey](#) of state education agencies. NCES estimates private school expenditures (\$64.0 billion) on the basis of enrollment data provided through the [Private School Universe Survey](#) of 35,000 schools and per pupil expenditure data from older surveys, adjusted for inflation.

Notes: The accuracy of the expenditures figure in this category is deemed high as the two surveys cover the universe of the nation’s public and private schools, the National Public Education Finance Survey is mandatory, and the Private School Universe Survey response rate is very high.

Table 1. Annual Expenditures for Workforce Education and Training in the U.S., 2017 Estimates

Category	Coverage	Estimated Expenditures (billion \$)	% of Overall	Data Sources	Nature of Data Estimate
Total		1,920.9			
Educational Institutions		1,325.5	69.0%		
Elementary and Secondary Education (K-12)	Public school systems and private schools.	\$789.0	41.1%	Digest of Education, NCES	Enumeration
Title IV Degree-Granting Institutions of Higher Education (IHEs)	Public, private nonprofit, and private for-profit Title IV IHEs.	\$468.1	24.4%	Digest of Education, NCES	Enumeration
Non-Title IV Degree-Granting Institutions of Higher Education (IHEs)	Public, private nonprofit, and private for-profit Title IV IHEs not Title IV-eligible.	\$1.3	0.1%	IPEDS and state ETPLs	Partial enumeration + extrapolation
Private Education and Training Organizations (Non-Degree)	Private nonprofit and for-profit organizations that grant only certificates—such as business schools, computer training programs, and technical and trade schools.	\$51.0	2.7%	Economic Census, Census Bureau	Enumeration
	Educational support services—such as counseling and testing services.	\$16.1	0.8%	Economic Census, Census Bureau	Enumeration
Employer-Sponsored Training		\$516.1	26.9%		
Employer Direct Training Expenditures	Direct expenditures for training staff and external vendors and consultants.	\$138.8	7.2%	Training Magazine, Academic literature	Sample survey + extrapolation
Employee Earning During Training	Worker salaries and wages paid during training (formal and informal).	\$377.3	19.6%	BLS Survey of Employer-Provided Training 1995	Sample survey + extrapolation
State and Federal Government Funding		\$79.3	4.1%		
State-Funded Education and Workforce Development Systems, Schools, and Programs	State-funded schools and programs—including non-degree technical schools, schools for the blind, adult education and vocational rehabilitation programs, and workforce development education and training programs. Oversight of state K-12 and higher education systems.	\$55.0	2.9%	Census of Governments, Census Bureau, CZER state workforce dev program database	Enumeration
Federal Workforce Development Grant Programs	38 Federal work-force development grant programs identified by GAO.	\$15.8	0.8%	GAO and Catalog of Federal Domestic Assistance	Enumeration
U.S. Military Training and Education (Active Duty)	Recruit training, specialized skills training, officer acquisition, pro-fessional development, Senior ROTC, flight training, and training support.	\$8.5	0.4%	DoD Operation and Maintenance Overview, FY 2018 Budget Estimates	Enumeration

Title IV Degree-Granting Institutions of Higher Education (IHEs)

- **Amount:** \$468.1 billion
- **Coverage:** Education-related expenditures for all Title IV degree-granting institutions of higher education (public, private nonprofit, private for-profit). Title IV institutions are those eligible to offer federal student financial aid.
- **Time Period:** Academic year 2017-18

Data Sources and Methods: Data obtained from Tables 334.10, 334.30, and 334.50, [2018 Digest of Education Statistics](#), National Center for Education Statistics (NCES), U.S. Department of Education. NCES obtains these data through the [Finance Component](#) of the [Integrated Postsecondary Education Data System](#) (IPEDS).

In 2017-18, IPEDS collected data from 6,642 postsecondary institutions in the United States and the other jurisdictions that are eligible to participate in Title IV Federal financial aid programs. All Title IV institutions are required to respond to IPEDS.

For the current study, researchers sought to prepare a figure that represents Title IV IHE expenditures for education only. To generate that figure, it subtracted four types of expenditures from total IHE expenditures (\$603.9 billion)—public service, hospitals, independent operations, and other. The resulting figure includes expenditures for instruction, research, academic support, student services, institutional support, auxiliary enterprises, and net grant aid to students.¹

Notes: The accuracy of total Title IV IHE expenditures is deemed to be high as participation in IPEDS is mandatory. Researchers' decision to exclude four expenditure categories as non-educational in nature is a judgment call that on balance provides a more accurate figure. (While it may result in the removal of some educational expenditures, it is expected that the seven categories deemed educational include some non-educational activities.)

Non-Title IV Degree-Granting Institutions of Higher Education (IHEs)

- **Amount:** \$1.3 billion
- **Coverage:** Education-related expenditures for all non-Title IV degree-granting institutions of higher education (public, private nonprofit, private for-profit).
- **Time Period:** Academic year 2017-18

Data Sources and Methods: The 2020 credential count identifies 569 non-Title IV schools with 1,830 credential programs. IPEDS provides education expenses for 46 non-Title IV schools with 331 programs—totaling \$384.1M (across the same seven categories as for Title IV schools). Researchers calculated that non-Title IV schools in IPEDS averaged 7.2 credentials per school, compared to 2.9 credentials per school not in IPEDS. On the basis of this difference, researchers conservatively estimated expenditures for the category at \$1.3 billion.

¹ See [IPEDS Glossary](#) for definition of each expenditure category.

Notes: In the absence of spending data for 82 percent of schools in this category, \$1.3 billion is a rough estimate. At the same time, as category expenditures are quite small relative to those in all other categories, a revision of +/- 50 percent would not materially change total national spending on education and training.

Private Education and Training Organizations (Non-degree)

Amount: \$67.1 billion

Coverage:

- Private nonprofit and for-profit organizations that grant only certificates (\$50.1 billion)—Business and Secretarial Schools (NAICS 61141), Computer Training (61142), Professional and Management Development Training (61143), Technical and Trade Schools (61151), Fine Arts Schools (61161), Sports and Recreation Instruction (61162), Language Schools (61163), and All Other Schools and Instruction (61169)
- Educational support services (\$16.1 billion)—Educational Support Services (61171).
- Chart 1 on the next page has a detailed list of private education and training organizations.

Time Period: Calendar Year (CY) 2017

Data Sources and Methods: Table EC1700BASIC, [2017 Economic Census](#), U.S. Census Bureau. The data collection covers 70,800 firms and is mandatory.

Notes: The accuracy of the expenditures in this category is deemed high as the Economic Census covers the universe of educational services firms and is mandatory.

Employer-Sponsored Training

Category Total = \$516.1 billion

Employer Direct Training Expenses

- **Amount:** \$138.8 billion
- **Coverage:** Private and public sector employers
- **Time Period:** CY2017

Data Sources and Methods: In 2017, U.S.-based corporations and educational institutions with 100 or more employees spent an estimated \$93.6 billion in direct training expenditures, according to the [2017 Training Industry Report](#) from *Training* (pp. 20-33). Direct training expenditures include training budgets, training staff payroll, and spending on external products and services.

Chart 1. Detailed Categories for Private Education and Training Organizations (Non-Degree)**Business and Secretarial Schools (NAICS 61141)**

- Clerical, secretarial, or court reporting school (611410 001)

Computer Training (NAICS 61142)

- Computer and information technology (IT) training services, including computer programming, gaining proficiency with software packages and systems, IT security, and local area network (LAN) management (Exclude computer repair and digital document recovery training.) (611420 003)

Professional and Management Development Training (NAICS 61143)

- Medical technician and nursing continuing education and recertification services (611430 003)
- Business leadership and skills development training services, including providers of seminars or instruction for the enhancement of professional and management skills. (Exclude degree-granting colleges and universities.) (611430 004)
- Teacher and staff professional development training and continuing education services (611430 005)
- Youth scholars and leadership programs (Exclude social services.) (611430 006)

Technical and Trade Schools (NAICS 61151)

- Barber or hairdresser college or school (611511 002)
- Cosmetology or beauty (including skin and nail care) school (611511 004)
- Flight/Pilot training school (611512 002)
- Apprenticeship training services, including HVAC, electrical, mechanical, plumbing, welding, and carpentry (611513 003)
- Dental or medical technician or nursing aide school (611519 10B)
- Massage therapy school (611519 10A)
- Culinary school (611519 10C)
- Training of instructors for yoga, personal trainers, and other fitness certifications (611519 104)
- Real estate school (611519 106)
- Vocational school, including HVAC, electrical, mechanical, plumbing, welding, and carpentry (Exclude apprenticeships.) (611519 107)
- Commercial art or graphic art school (611519 108)
- Modeling or acting school (611519 109)
- Truck driving school (Exclude automobile and motorcycle driving schools.) (611519 301)

Fine Arts Schools (NAICS 61161)

- Dance school or studio providing instruction, including children's and professionals' (611610 101)
- Art, drama, music, or other fine arts school (611610 201)

Sports and Recreation Instruction (NAICS 61162)

- Sports and recreation instruction, including swimming, gymnastics, horseback riding, martial arts, etc. (Exclude clubs, teams, or leagues. Include day and/or overnight instructional sports and recreation camps.) (611620 001)

Language Schools (NAICS 61163)

- Language school (Exclude elementary or secondary schools.) (611630 001)

All Other Schools and Instruction (NAICS 61169)

- Basic academic skills learning center and adult literacy groups (Exclude social services.) (611691 004)
- Tutoring and exam preparation services, including college board preparation (611691 005)
- Automobile and motorcycle driving school, including driver education (611692 002)
- Yoga or pilates instruction (Exclude instruction included with a fitness complex membership.) (611699 001)
- First aid, CPR, lifeguard, and survival skills training (Include military combat and security guard training.) (611699 002)

Educational Support Services (NAICS 61171)

- Educational guidance services—evaluating and advising students and families on recommended course of study, choice of schools or colleges, financial aid, international exchange and education, study abroad, etc. (611710 104)
- Educational research and curriculum development services (611710 105)
- Educational testing services (611710 201)
- Educational test development and evaluation services (611710 202)

The *Training* report estimated an average training expenditure per learner of \$1,075. The study attributes lower costs per learner in larger organizations to economies of scale.² Average spending per learner declined with increased firm size as follows:³

- \$1,886 per learner for companies of between 100 and 999 employees;
- \$941 for companies of between 1,000 and 9,999 employees; and
- \$399 for companies of 10,000 or more employees.

Researchers sought to estimate training expenditures for private firms of under 100 employees, a category not covered in the *Training* estimate. One journal article indicates formal workplace training is relatively rare in the smallest firms (under 20 employees) and there is the “adoption of formal, structured, and development-oriented training with increasing firm size (especially for firms with 20–99 employees).”⁴ In addition, the 1995 Survey of Employer-Provided Training (SEPT95) conducted by the Bureau of Labor Statistics (BLS) indicated that on average the number of formal training hours for workers in establishments of 50-99 employees was 60.7 percent of that for workers in establishments of 100-499 employees and 49.4 percent of that for workers in establishments of 500 or more employees.⁵

Considering the above research findings (and the absence of other useful studies in the literature), researchers estimate 2017 training expenditures for firms of under 100 employees to be \$34.2 billion, as follows:

- **Firms with less than 20 employees:** According to the Census Bureau, these firms employed 21,096,447 workers in 2017.⁶ We estimate the workplace training spending per worker to be 20 percent of \$1,886 (the *Training* figure for smaller firms), that is, \$377 (reflecting fewer hours and low economies of scale). On this basis, the estimate for the category is \$8.0 billion.
- **Firms with between 20 and 99 employees:** According to the Census Bureau, these firms employed 21,348,103 workers in 2017. We estimate the workplace training spending per worker to be 65 percent of \$1,886 (the *Training* figure for smaller firms), that is, \$1,226. On this basis, the estimate for the category is \$26.2 billion.

² The study’s assertion is consistent with Dan A. Black, Brett J. Noel, and Zheng Wang, “On-the-Job Training, Establishment Size, and Firm Size: Evidence for Economies of Scale in the Production of Human Capital,” *Southern Economic Journal*, 1999, 66(1), pp. 82-100.

³ As used in the *Training* study, “per learner” means “per worker,” not per person receiving training. According to the Census Bureau, firms with 100 or more workers employed 86,147,262 workers in 2017. Multiplying that figure by the *Training* study’s average spending per learner of \$1,075 equals \$92.6 billion, just \$1 billion less than the *Training* estimate (which used a Dun & Bradstreet database).

⁴ Bernice Kotey and Cathleen Folker, “Employee Training in SMEs: Effect of Size and Firm Type—Family and Nonfamily,” *Journal of Small Business Management*, 2007, 45(2), pp. 214-238.

⁵ Harley Frazis, Maury Gittleman, Michael Horrigan, and Mary Joyce, “[Results from the 1995 Survey of Employer-Provided Training](#),” *Monthly Labor Review*, June 1998, pp. 3-13.

⁶ Census Bureau, [Statistics of U.S. Businesses](#). BLS does not provide data by firm size, only establishment size.

Researchers also estimated training expenditures for government agencies outside of education as \$11.0 billion, as follows:

- **Federal government (civilian):** According to the Bureau of Economic Analysis (BEA), the federal government employed 2,918,000 civilian workers in 2017. We estimate federal workplace training spending per worker to be the same as the *Training* figure for large firms, that is, \$399. On this basis, the estimate for the category is \$1.2 billion.
- **State and local government (other than education):** According to BEA, state and local governments employed 9,225,000 workers outside of education in 2017. We estimate state and local government workplace training spending per worker to be the same *Training* figure for all firms, that is, \$1,075. On this basis, the estimate for the category is \$9.8 billion.

Notes: The estimate for this category is based on one survey of 316 firms and one academic study on relative expenditures by the smallest firms. As other usable figures are lacking, the reliability of the category estimate is considered to be moderate. While two other annual surveys measure firm spending on workplace training, neither is U.S.-specific.⁷

Employee Earnings During Training

- **Amount:** \$377.3 billion
- **Coverage:** Private and public sector employers
- **Time Period:** CY2017

Data Sources and Methods: For SEPT95, BLS surveyed a sample of 1,433 private establishments with 50 or more employees. Consistent with the finding in the previous section, BLS indicated that “[t]he sample was restricted to establishments with 50 or more employees in part because previous research showed that smaller establishments often have no formal training.”

The SEPT95 found that workers (full- and part-time) spent an average of 44.5 hours in formal and informal training over a six-month period (May–October 1995).⁸ BLS then estimated the wage and salary costs paid to employees during their training (“opportunity costs”) because “the time that employees spend in training is time that they could have spent working at their jobs.”

In the absence of more recent research, researchers assume that the SEPT95 finding of hours spent in training in establishments with 50 or more workers remained valid for 2017. Over a 26-week period of 34.4 hours per week (the average weekly hours per worker in 2017), this level of training effort equals 4.98 percent of all work hours.⁹ In the first quarter of 2017, earnings in establishments with 50 or more workers equaled \$1.13 trillion; the training portion of those earnings was \$56.5 billion, or \$226.1 billion annualized.¹⁰

⁷ The first report is ATD, “2017 State of the Industry.” The report is global in coverage, indicating only that “more than 80 percent of participants in the 2017 State of the Industry were headquartered in advanced economies.” The second report is Training Industry, “The Anatomy of the Modern Learning System,” 2018. This report has a breakout for North America, but not the United States specifically.

⁸ SEPT95 found a per worker average of 13.5 hours in formal training and 31.1 hours in informal training. “Formal training is defined in the survey as training that is planned in advance and that has a structured format and a defined curriculum. Informal training is unstructured, unplanned, and easily adapted to situations and individuals.”

⁹ The percentage of workers who were full-time in 2017 is approximately as the figure in 1995. BLS says that in 3Q1995, 82.3 percent of employees worked 35 or more hours a week. In 3Q2017, the figure was 82.6 percent.

¹⁰ Wage data by establishment size are available from BLS only for 1Q2017.

The researchers assume that the percent of hours in informal training (3.48) for employees in establishments of under 50 employees is the same as that for larger establishments. This finding is consistent with those in SEPT95.¹¹ On this basis, pay for employees at establishments under 50 employees in 2017 during informal training is estimated to be \$85.1 billion.

Findings noted earlier indicate that establishments of less than 50 employees have substantially less formal training than larger establishments. For the purposes of this analysis, researchers assume in establishments of under 20 employees the number of hours in formal training is 10 percent of that for establishments of 50 or more employees and 30 percent in establishments between 20 and 49 employees. On this basis, researchers roughly estimate wages and salaries paid during formal training in establishments of less than 50 employees to be \$6.7 billion.

Finally, researchers assumed that the SEPT95 finding for formal and informal training hours per worker applies to public sector workers as well. On this basis, researchers estimate wages and salaries paid during training in public sector establishments to be \$59.6 billion.

Notes: SEPT95 legitimates the idea of measuring employee earnings during training as a cost of training. While relying on 1995 training hours spent and making assumptions about public and small private establishments is not ideal, at present an alternative is not available.

State and Federal Government Funding

Category total = \$79.3 billion

State-funded Workforce Development and Education

- **Amount:** \$55.0 billion
- **Coverage:** State-funded schools and programs—including non-degree technical schools, schools for the blind, adult education and vocational rehabilitation programs, and workforce development education and training programs. In addition, includes oversight of state K-12 and higher education systems.
- **Time Period:** Fiscal Year (FY) 2017

Data Sources and Methods: Education Services: Other Education spending (\$53.2 billion) in Table 1, [2017 State & Local Government Finance Historical Datasets and Tables](#), U.S. Census Bureau. Workforce development and preparation spending (\$1.8 billion) from the State Incentives Database of the [Council for Community and Economic Research](#) (C2ER).

Notes: This category does not include federal workforce development grants received by states.

¹¹ SEPT95 estimates that between May–October 1995, workers in establishments of 50–99 employees averaged 31.9 hours of informal training each; in establishments of 100–499 employees, 34.5 hours; and in establishments with 500 or more employees, 26.0 hours.

Federal Workforce Development Grant Programs

- **Amount:** \$15.8 billion
- **Coverage:** Thirty-nine federal programs that provide grants to enhance the job skills of individuals through education and training programs.
- **Time Period:** FY2017

Data Sources and Methods: The list of 39 programs is taken from U.S. Government Accountability Office, "Employment and Training Programs: Department of Labor Should Assess Efforts to Coordinate Services Across Programs," [GAO-19-200](#), March 2019. FY2017 expenditures for each program are taken from the Catalog of Federal Domestic Assistance (via [beta.sam.gov](#)), the GAO report cited above, or the program agency website.

Notes: An undetermined amount of federal grant funds goes to IHEs and private education and training organizations to provide education and training services. In this report's framework, such spending is "double-counted." Grants to states counted in this category are not double-counted as they are not included in the state category above ("State-funded Workforce Development and Education").

U.S. Military Training and Education

- **Amount:** \$8.5 billion
- **Coverage:** Provision of training and education to active duty military and Reserve Officer Training Corps (ROTC). Categories of effort include recruit training (\$149 million), specialized skills training (\$2.833 billion), officer acquisition (\$397 million), professional development (\$1.422 billion), senior ROTC (\$704 million), flight training (\$1.651 billion), and training support (\$1.303 billion). Organizations delivering training and education include:
 1. Training centers and schools, service academies, and Reserve Officer Training Corps (ROTC) for the Army, Navy, Marine Corps, and Air Force; and
 2. DoD and joint-service schools and colleges such as the Defense Acquisition University; National Defense University; and the Uniformed University of the Health Sciences.
- **Time Period:** FY2017

Data Sources and Methods: Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer, "[Operation and Maintenance Overview: Fiscal Year 2018 Budget Estimates](#)," June 2017, pp. 151-153.

Notes: The spending figure does not include the salaries of the recruits and classroom students.

Conclusion

This report, alongside our [2021 Counting U.S. Postsecondary and Secondary Credentials](#), gives us an unprecedented understanding of the credential landscape. With one million unique credentials in the U.S. alone and with almost two trillion dollars in yearly education and training expenditures, we must find ways to [align our data systems](#), map our credential pathways, and increase equitable access to timely, trusted, and quality credential information. The credential landscape is vast and the investments too large to continue ahead without the best possible information at our disposal. We need all stakeholders to be involved.

This report comes at a time when the entire country is in need of continued investment in human capital. With credential transparency we can make sure we are investing in the right places; creating avenues for individuals to efficiently and effectively get the skills and credentials they will need for the jobs of tomorrow; ensuring providers are offering in-demand and complimentary opportunities; and informing businesses on who can fill the jobs they need and where current employees can upskill.



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