

It's that time of year—students have headed back to school! This issue of our *Hibbs Outlook* newsletter focuses on education and its relationship to income. This is one issue you will want to give to your own students, your grandchildren or neighbor children and send to teachers everywhere.

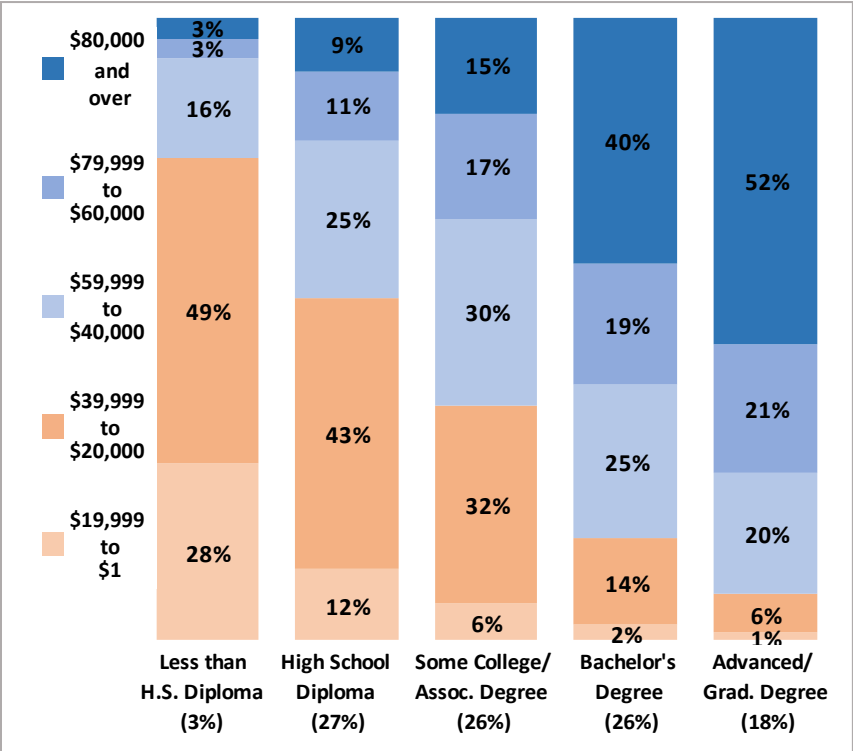
Generally, the more education, the greater a person's income. **Chart 1** below shows the proportions (which can also be interpreted as probabilities) of workers earning more as educational attainment increases. **Chart 2** on the next page shows median lifetime earnings by educational attainment. **Charts 3-5** show average earnings by occupation for *East Texas** and the predicted growth in demand for each occupation through 2026.

Chart 1 (to the right) shows for 2016 how higher levels of education for U.S. workers ages 35 to 44—an age group in which most have finished school and are in full career development—lead to higher annual earnings.

For example, 52% of workers with advanced graduate degrees earn more than \$80,000 (dark blue portion of far right column), and sometimes much more. Only 9% of workers with a high school diploma earn that much each year.

Note that 59% of workers with a four-year bachelor's degree earn \$60,000 or more (sum of dark blue and medium blue for bachelor's degree).

Chart 1. Distribution of Full-Time, Year-Round U.S. Workers Ages 35 to 44 by Education Level and Annual Income, 2016



Note: The percentages shown in parentheses below the vertical bars give the share of all workers in each educational level and may not sum to 100 due to rounding.

Source: U.S. Census Bureau, Current Population Survey, 2017 Annual Social and Economic Supplement; Personal Income-03; calculations by the authors.

**East Texas* is defined as a region with more than 1.1 million inhabitants in 23 counties: Anderson, Bowie, Camp, Cass, Cherokee, Delta, Franklin, Gregg, Harrison, Henderson, Hopkins, Lamar, Marion, Morris, Panola, Rains, Red River, Rusk, Smith, Titus, Upshur, Van Zandt, and Wood.

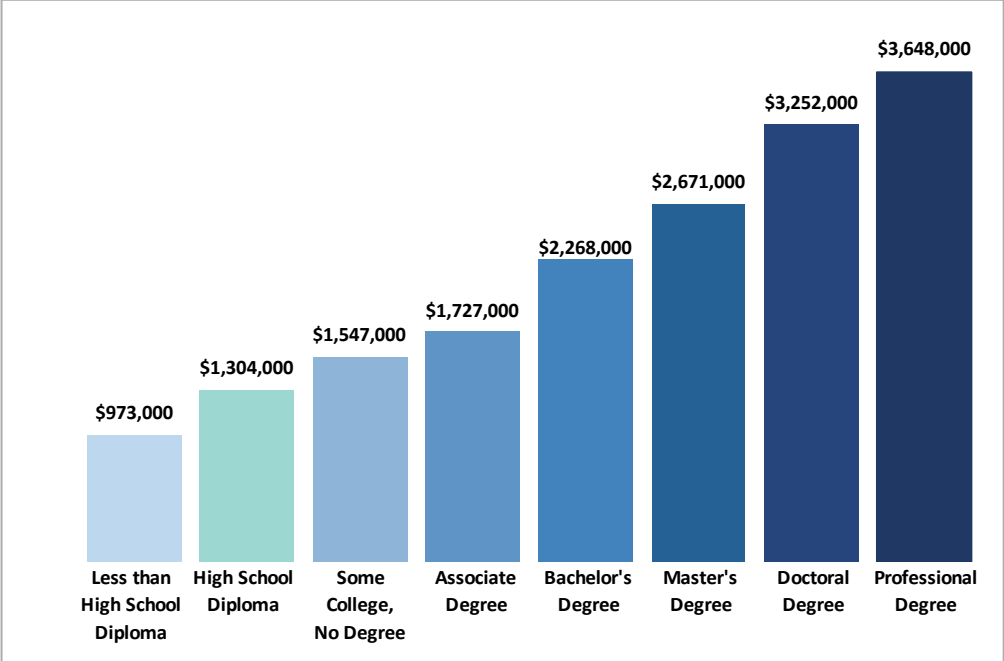


Differences in annual income add up over a lifetime of working. On average, those with a four-year university degree earn about \$1 million more during their lifetimes than those stopping with a high school diploma. The University degree advantage over a two-year junior college associate’s degree (or some college) amounts to an extra \$541,000 (2009 dollars).

Those with a master’s degree earn twice as much as a high school graduate, on average, and those with a professional doctoral degree earn nearly triple what someone with a high school diploma earns, coming in at more than \$3.6 million for the same number of work years (2009, dollars).

Higher incomes allow for acquisition of wealth—such as houses, savings and other financial investments—too. That wealth, building over time, also provides income for retirement and other uses later in life.

Chart 2. Lifetime Earnings by Educational Attainment, 2009 Dollars

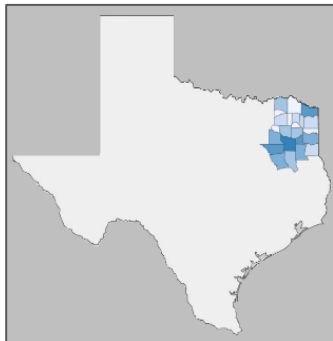


Source: A.P. Carnevale, S.J. Rose, and B. Cheah; “The College Payoff: Education, Occupations, Lifetime Earnings,” The Georgetown University Center on Education and the Workforce, 2011.

“It’s not only about the money!” some will say and, of course, they are right. Other factors come into play when discussing careers. Job satisfaction matters, for example. According to the *Employee Job Satisfaction Engagement Report*, an excellent survey on this topic, a higher salary and benefits are only the beginning of job satisfaction, not the end. People are happier doing something they truly like, and something they think is valuable to others, all else equal. We think of all those graduation speeches where students are exhorted to follow their passions.

In the same respected survey, developed by the Society for Human Resource Management, certain other important factors affecting workplace satisfaction are noted. These are company-specific. Respondents say that *respect* is the highest rated characteristic a workplace (company, church, government or other organization) can give its workers. Next on their list are *trust, security, healthy environment, and career path*. These important job satisfaction characteristics have to do with specific company policies and particular jobs or occupations and are essential subjects for inquiry by graduates during job interviews.

Some careers require a great deal of education or training (8-10 years for a physician, for example), so any extra up-front investment costs should be considered, too. Some careers are physically safer than others (night taxi driving and steel workers on tall skyscrapers come to mind on the negative side of the scale). Still other careers require more repetitive daily tasks, while some occupations offer a variety of problems to solve daily. Rarely mentioned in any formal way to young students are certain extra benefits associated with careers that involve university degrees. Some of these benefits include much lower rates of unemployment in difficult economic times and even such personal and social benefits as lower divorce and reduced incarceration rates.



Annual Earnings by Occupation in East Texas

Charts 3, 4 and 5, provide both average annual earnings, entry level earnings (i.e., starting pay) and projected job growth for occupations in East Texas. Out of 457 occupations (at the 5-digit SIC code level), we could fit in this published edition of *Hibbs Outlook* only 110 of those. **Chart 3** presents the top 30 in terms of earnings; **Chart 5** presents the bottom 30 occupations; and **Chart 4** presents 50 selected occupations from the middle-earning 396 that the authors thought would be of most interest to East Texans. Please visit our website to see the electronic version of this newsletter with all 457 occupations presented.

Chart 3 lists 30 top-paying East Texas employment categories in 2017. The second column of figures shows the entry level salary for each occupation, while the next two columns provide corresponding averages for the state of Texas and the nation. The last column gives the total projected job growth through 2026 for each occupation.

Chart 3. 30 Best Paid Occupations in East Texas, Out of 457 (Annual Earnings)

	Occupation	East Texas (Average)	East Texas (Entry Level)	Texas (Average)	USA (Average)	Projected Growth*
1	Physicians and Surgeons	\$223,200	\$98,600	\$207,400	\$214,900	12.8%
2	Chief Executives	\$152,900	\$75,900	\$233,300	\$196,100	-3.9%
3	Podiatrists	\$152,100	\$42,200	\$167,100	\$148,500	10.3%
4	Architectural and Engineering Managers	\$150,300	\$100,300	\$170,200	\$146,300	5.5%
5	Dentists	\$147,800	\$97,900	\$178,400	\$180,800	19.1%
6	Pharmacists	\$141,300	\$94,600	\$126,500	\$121,700	5.6%
7	Nurse Anesthetists	\$141,100	\$94,200	\$152,500	\$169,500	16.2%
8	Petroleum Engineers	\$135,600	\$64,300	\$170,500	\$154,800	15.2%
9	Mining and Geological Engineers	\$129,100	\$56,300	\$148,600	\$103,700	8.2%
10	Marketing and Sales Managers	\$128,800	\$64,100	\$148,100	\$140,600	8.4%
11	Chemical Engineers	\$126,100	\$72,500	\$145,700	\$112,400	7.5%
12	Optometrists	\$119,800	\$65,700	\$119,000	\$119,100	17.9%
13	Computer and Information Systems Managers	\$118,900	\$73,500	\$160,500	\$149,700	12.0%
14	Purchasing Managers	\$118,400	\$66,000	\$133,800	\$121,800	5.5%
15	Financial Managers	\$118,200	\$64,100	\$151,200	\$143,500	18.7%
16	General and Operations Managers	\$113,800	\$44,100	\$135,500	\$123,500	9.1%
17	Aircraft Pilots and Flight Engineers	\$113,500	\$62,500	\$167,400	\$137,800	3.5%
18	Natural Sciences Managers	\$112,800	\$65,500	\$133,900	\$133,700	9.9%
19	Training and Development Managers	\$112,500	\$61,900	\$133,100	\$117,700	10.3%
20	Public Relations and Fundraising Managers	\$112,200	\$56,800	\$131,300	\$127,700	10.4%
21	Aerospace Engineers	\$110,200	\$71,900	\$117,300	\$115,300	6.1%
22	Compensation and Benefits Managers	\$107,300	\$60,900	\$125,100	\$130,000	5.0%
23	Industrial Production Managers	\$106,300	\$64,400	\$121,900	\$110,600	-0.5%
24	Nurse Practitioners	\$106,300	\$82,900	\$111,300	\$107,500	36.1%
25	Miscellaneous Engineers	\$104,300	\$64,800	\$114,600	\$99,300	6.4%
26	Human Resources Managers	\$104,200	\$61,500	\$134,100	\$123,500	9.1%
27	Sales Engineers	\$104,100	\$61,500	\$107,800	\$107,000	6.9%
28	Computer Hardware Engineers	\$103,300	\$65,700	\$113,400	\$119,700	5.5%
29	Electrical and Electronics Engineers	\$101,900	\$66,800	\$109,800	\$102,600	6.5%
30	Management Analysts	\$101,500	\$48,200	\$98,900	\$93,400	14.3%

*Projected Growth Change 2016-2026; Bureau of Labor Statistics, U.S. Department of Labor.
Source: Occupational Wages, JobsEQ, 2017 data, 23 Counties in East Texas.

Chart 4. Average Earnings of 50 Selected Occupations in East Texas (From ranks 31 through 396)

Occupation	East Texas (Average)	East Texas (Entry Level)	Texas (Average)	USA (Average)	Projected Growth*
Transportation, Storage, & Dist. Managers	\$100,400	\$59,900	\$104,400	\$100,700	6.7%
Veterinarians	\$97,600	\$62,400	\$109,900	\$101,500	18.8%
Physician Assistants	\$97,000	\$63,400	\$95,900	\$104,800	37.3%
Actuaries	\$93,900	\$49,200	\$112,400	\$114,900	22.5%
Civil Engineers	\$93,500	\$58,600	\$100,400	\$91,800	10.6%
Advertising and Promotions Managers	\$92,900	\$38,900	\$107,000	\$123,900	5.5%
Mathematicians	\$87,300	\$46,200	\$105,900	\$104,700	29.7%
Construction Managers	\$86,700	\$52,900	\$100,300	\$101,000	11.1%
Economists	\$85,500	\$48,600	\$102,400	\$112,700	6.3%
Financial Examiners	\$79,400	\$46,800	\$93,200	\$91,800	9.8%
Education Administrators	\$76,600	\$50,600	\$87,400	\$94,700	9.2%
Credit Counselors and Loan Officers	\$75,400	\$39,600	\$83,300	\$75,200	11.6%
Accountants and Auditors	\$73,200	\$42,200	\$81,300	\$77,900	10.0%
Chiropractors	\$71,400	\$38,600	\$77,800	\$83,400	12.5%
Dental Hygienists	\$69,800	\$55,900	\$74,000	\$74,700	19.7%
Statisticians	\$68,000	\$40,300	\$80,200	\$89,000	33.8%
Farmers, Ranchers, and Other Agricultural Managers	\$67,600	\$28,100	\$78,300	\$80,300	-0.8%
Sales Representatives, Wholesale and Manufacturing	\$63,100	\$32,300	\$77,300	\$72,500	5.2%
Geological and Petroleum Technicians	\$62,700	\$30,100	\$68,600	\$63,500	16.4%
Registered Nurses	\$61,800	\$46,700	\$72,100	\$73,600	14.8%
Real Estate Brokers and Sales Agents	\$60,900	\$24,200	\$74,100	\$63,200	5.6%
Physical Therapist Assistants and Aides	\$60,000	\$37,000	\$52,400	\$46,400	30.4%
Food Service Managers	\$55,600	\$31,700	\$63,100	\$57,300	9.0%
Flight Attendants	\$54,600	\$34,200	\$55,100	\$52,700	10.2%
Human Resources Workers	\$54,000	\$32,500	\$67,300	\$66,100	5.2%
Secondary School Teachers (High School)	\$49,700	\$37,900	\$58,000	\$62,700	7.5%
Police Officers	\$49,500	\$34,700	\$62,400	\$64,500	7.0%
Elementary and Middle School Teachers	\$47,500	\$37,500	\$56,700	\$60,900	7.4%
Social Workers	\$47,200	\$34,800	\$49,800	\$51,600	16.1%
Firefighters	\$45,500	\$28,400	\$53,500	\$51,900	7.2%
Electricians	\$43,600	\$30,400	\$49,300	\$57,900	8.9%
Sociologists	\$42,400	\$26,200	\$43,500	\$86,100	1.3%
Paralegals and Legal Assistants	\$41,300	\$28,800	\$54,900	\$53,900	14.6%
Pipelayers, Plumbers, Pipefitters, and Steamfitters	\$40,800	\$28,200	\$46,900	\$55,800	15.8%
Brickmasons, Blockmasons, and Stonemasons	\$40,300	\$29,900	\$43,000	\$51,300	10.9%
Heating, Air Conditioning, Refrigeration Mech. & Inst.	\$40,000	\$30,000	\$45,400	\$49,500	14.7%
Construction Equipment Operators	\$38,700	\$28,300	\$40,800	\$50,900	12.3%
Preschool and Kindergarten Teachers	\$38,100	\$26,700	\$41,300	\$40,000	9.8%
News Analysts, Reporters and Correspondents	\$37,300	\$18,400	\$46,700	\$55,900	8.9%
Carpenters	\$35,400	\$26,500	\$40,000	\$49,600	8.2%
Carpet, Floor, and Tile Installers and Finishers	\$33,400	\$22,200	\$35,400	\$45,000	9.6%
Photographers	\$33,000	\$17,200	\$44,700	\$41,900	-5.6%
Dancers and Choreographers	\$32,500	\$17,900	\$37,100	\$39,000	4.0%
Pest Control Workers	\$32,500	\$23,400	\$39,600	\$36,600	8.2%
Construction Laborers	\$30,200	\$23,000	\$31,200	\$38,900	12.4%
Bus Drivers	\$27,300	\$20,300	\$31,500	\$35,600	6.3%
Bartenders	\$26,900	\$17,200	\$27,500	\$26,300	2.5%
Tellers	\$26,300	\$20,400	\$27,500	\$28,900	-8.3%
Retail Salespersons	\$25,400	\$17,200	\$26,700	\$27,500	1.7%
Barbers, Hairdressers, Hairstylists and Cosmetologists	\$24,000	\$17,500	\$28,500	\$30,500	13.0%

*Projected Growth Change 2016-2026; Bureau of Labor Statistics, U.S. Department of Labor.

Source: Occupational Wages, JobsEQ, 2017 data, 23 Counties in East Texas.



Chart 5. 30 Least Paid Occupations in East Texas, Out of 457 (Annual Earnings)

	Occupation	East Texas (Average)	East Texas (Entry Level)	Texas (Average)	USA (Average)	Projected Growth*
428	Motion Picture Projectionists	\$23,300	\$16,900	\$24,400	\$24,800	-9.7%
429	Textile Machine Setters, Operators, and Tenders	\$23,300	\$17,300	\$24,900	\$28,900	-17.5%
430	Miscellaneous Agricultural Workers	\$23,200	\$17,900	\$24,000	\$26,300	4.4%
431	Baggage Porters, Bellhops, and Concierges	\$23,000	\$18,200	\$24,200	\$28,800	9.5%
432	Bakers	\$23,000	\$17,300	\$25,800	\$27,900	3.7%
433	Fishers and Related Fishing Workers	\$22,400	\$17,300	\$22,100	\$31,200	10.8%
434	Misc. Food Preparation & Ser. Related Workers	\$22,200	\$16,900	\$23,700	\$24,400	6.1%
435	Cooks	\$22,100	\$17,300	\$23,800	\$25,400	6.1%
436	Laundry and Dry-Cleaning Workers	\$22,100	\$16,600	\$22,800	\$23,800	-0.2%
437	Sewing Machine Operators	\$22,100	\$17,300	\$23,400	\$26,300	-16.7%
438	Parking Lot Attendants	\$22,000	\$16,800	\$23,000	\$24,300	6.2%
439	Nonfarm Animal Caretakers	\$21,800	\$17,000	\$23,100	\$25,200	24.2%
440	Teacher Assistants	\$21,600	\$17,200	\$23,500	\$28,000	8.4%
441	Building Cleaning Workers	\$21,600	\$17,000	\$22,900	\$26,900	8.5%
442	Graders and Sorters, Agricultural Products	\$21,600	\$17,400	\$23,800	\$24,600	-0.9%
443	Miscellaneous Personal Care and Service Workers	\$21,500	\$16,600	\$22,100	\$27,800	23.0%
444	Food Preparation Workers	\$21,100	\$17,100	\$23,200	\$23,900	7.9%
445	Hotel, Motel, and Resort Desk Clerks	\$21,100	\$16,700	\$21,600	\$24,300	4.4%
446	Waiters and Waitresses	\$20,900	\$16,700	\$23,900	\$25,300	7.0%
447	Misc. Entertainment Attendants & Rel. Workers	\$20,700	\$16,600	\$22,200	\$23,700	11.4%
448	Food Servers, Nonrestaurant	\$20,500	\$17,100	\$20,300	\$24,200	10.2%
449	Hosts, Restaurant, Lounge & Coffee Shop	\$19,900	\$16,500	\$21,300	\$22,300	6.9%
450	Ushers, Lobby Attendants, and Ticket Takers	\$19,900	\$16,600	\$22,200	\$22,600	7.5%
451	Cashiers	\$19,700	\$16,600	\$21,100	\$22,200	-0.9%
452	Pressers, Textile, Garment & Related Materials	\$19,500	\$17,300	\$20,400	\$23,100	-6.7%
453	Fast Food and Counter Workers	\$19,400	\$16,800	\$20,100	\$21,400	15.2%
454	Dishwashers	\$19,300	\$16,900	\$20,900	\$22,200	4.3%
455	Childcare Workers	\$19,300	\$16,800	\$21,600	\$23,800	6.9%
456	Personal Care Aides	\$19,300	\$16,800	\$19,300	\$24,100	38.6%
457	Dining Room, Cafeteria Att. & Bartender Helpers	\$19,100	\$16,800	\$20,400	\$23,100	7.1%

*Projected Growth Change 2016-2026; Bureau of Labor Statistics, U.S. Department of Labor.
Source: Occupational Wages, JobsEQ, 2017 data, 23 Counties in East Texas.

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