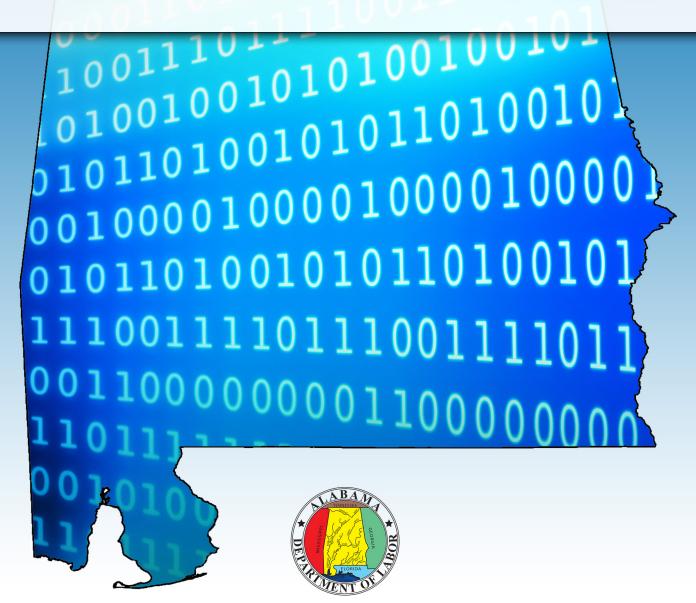


HIGH-TECH IN ALABAMA

CHANGING THE WAY ALABAMA DOES BUSINESS



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Alabama High-Tech Industry and Occupation Report Fall 2015

Alabama has over 1.85 million covered jobs, of which 141,300 were in high-tech industries in 2013. There were 73,000 jobs in the core concentration and 68,300 jobs in peripheral concentration. This is an increase of 500 jobs since 2008 including 140,700 high-tech jobs. The number of high-tech jobs only had a small increase but the percentage of high-tech jobs increased from 7.3% in 2008 to 7.7% in 2013. The 2013 average earnings per worker in high-tech industries were \$72,400. Monetary Authorities-Central Bank (5211) had the highest annual salary at \$109,600. Oil and Gas Extraction (2111) was second, with an annual salary of \$98,100. The high-tech industry had a 13.4% change from 2012 to 2022 and an average annual growth rate of 1.26%. Those industries not considered high-tech had a 10.9% change and an average annual growth rate of 1.04% during the same period. Computer Systems Design and Related Services (5415) had the largest projected increase with a gain of over 8,200 jobs in the 2012 to 2022 period.

While high-tech industries, as a whole, were increasing, there were 15 high-tech industries declining with Wired Telecommunications (5171) with the greatest loss of 840 jobs. The majority of workers in high-tech in 2013 were male, with an average of 66.7%, primarily an increase from 2008 which had an average of 65.2% male. There are three industries that are primarily responsible for this disparity in 2013; Aerospace Product and Parts Manufacturing (3364), Electric Power Generation, Transmission and Distribution (2211), and Architectural, Engineering, & Related Services (5413). These three industries were 74% male and made up 35% of the high tech jobs. All health care jobs were left out of this definition of high-tech. If they had been included, the results would have been completely different. In 2013 females would have made up 61.2% of the high-tech jobs. The health care industry with the largest difference between male and female workers is General Medical and Surgical Hospitals (6221). Over 58,000 positions were filled by women, which makes up 81% of that industry. The majority of the high-tech industries contain workers aged 24-64. The age group 25-44 contains 44% of the employment and the 45-64 age group contains 47%.

In 2014, the Alabama mean annual salary for high-tech occupations was \$81,800, well above the state mean annual salary of \$40,900. Of the 94 high-tech occupations that Alabama contains, only three had a mean annual salary below the state mean salary. These occupations included Civil Engineering Technicians, Biological Technicians, Surveying and Mapping Technicians. Twelve occupations had annual mean salary above \$100,000 of which Petroleum Engineers paid the most at \$132,700. Of the top 12 occupations by salary, 7 were associated with engineering, which included engineers, teachers, and managers. There were over 96,400 high-tech occupational jobs. There is a disparity between industry and occupation totals due to several reasons. First, industry totals include supporting occupations that are not considered high-tech. Second, NAICS 6112 (Junior Colleges) and 6113 (Colleges, Universities, and Professional Schools) are not considered high-tech industries. They contain those high-tech occupations in Postsecondary Teachers (25-000). In Alabama, 94 % of the high-tech occupations require a bachelor's degree or less and 20 % require only an associate's degree or less. Of the 93 occupations in the state, 5 are expected to lose jobs by 2022 and 14 should remain flat. Also, 44 of these occupations have average annual growth rates higher than the state total growth rate. Biological Science Teachers, Postsecondary is expected to have the highest annual growth rate at 3.58% and Agricultural Engineers the lowest at -6.7%. High-tech occupations are expected to add almost 14,000 jobs by 2022 and increase by 14% compared to all occupations which is expected to increase by 10%.

Alabama High-Tech Core Concentration Quarterly Workforce Indicators

			otal Dyment		et lows	Job C	reation	Ne Hir		Separa	ations	Turno	ver (%)
NAICS	Industry	2008	2013	2008	2013	2008	2013	2008	2013	2008	2013	2008	2013
3341	Computer and Peripheral Equipment Manufacturing	3,844	1,805	-46	-26	30	6	143	32	192	60	4.55	2.58
3342	Communications Equipment Manufacturing	1,995	1,849	4	-23	24	3	73	18	75	50	3.58	2.08
3344	Semiconductor and Other Electronic Component Manufacturing	2,179	1,538	-16	9	81	51	137	83	179	80	7.55	5.70
3345	Electronic instruments Manufacturing	2,589	2,205	17	10	42	61	82	87	70	85	3.15	4.08
3364	Aerospace Product and Parts Manufacturing	14,051	13,370	331	106	473	350	698	429	481	452	4.68	3.63
5112	Software Publishers	392	769	10	0	17	24	27	51	18	52	5.43	7.38
5182	Data Processing	1,130	1,255	-68	9	75	38	97	71	181	68	10.08	6.13
5191	Other Information Services	1,062	1,083	6	7	43	43	74	75	75	68	7.13	6.58
5413	Architectural, Engineering, and Related Services	23,798	21,973	209	-119	1,325	709	1,665	1,193	1,904	1,410	7.85	6.00
5415	Computer Systems Design and Related Services	16,865	22,018	788	154	1,419	781	1,446	1,320	1,126	1,217	9.00	5.90
5417	Scientific Research and Development Services	5,074	5,071	109	-16	185	104	303	212	213	245	5.28	4.73

^{*}Alabama High-Tech industries were obtained from the STEM driven High-Tech Industry Taxonomy report conducted by the High-Tech Committee funded by the Workforce Information Council, January 2015.

^{**} Source: Local Employment Household Dynamics Partnership between Alabama Department of Labor, Labor Market Information Division, and the U.S. Census Bureau, Quarterly Workforce Indicators.

^{***} Data not available due to confidentiality.

Alabama
High-Tech Core Concentration
Quarterly Workforce Indicators

		Aver Mon	•	Ave New	rage Hire	
NAICS	Industry	2008	2013	2008	2013	
3341	Computer and Peripheral Equipment Manufacturing	\$4,888	\$4,508	\$4,581	\$4,849	
3342	Communications Equipment Manufacturing	\$4,400	\$5,233	\$3,463	\$4,074	
3344	Semiconductor & Other Electronic Component Manufacturing	\$3,599	\$4,143	\$2,364	\$3,460	
3345	Electronic Instruments Manufacturing	\$5,058	\$5,603	\$4,190	\$4,055	
3364	Aerospace Product and Parts Manufacturing	\$6,103	\$7,069	\$5,583	\$5,980	
5112	Software Publishers	\$4,952	\$6,152	\$3,814	\$4,408	
5182	Data Processing	\$4,025	\$4,283	\$3,768	\$3,320	
5191	Other Information Services	\$2,285	\$2,668	\$1,724	\$2,371	
5413	Architectural, Engineering, and Related Services	\$5,563	\$6,471	\$4,709	\$5,514	
5415	Computer Systems Design and Related Services	\$6,092	\$6,698	\$5,188	\$5,382	
5417	Scientific Research and Development Services	\$6,648	\$7,181	\$5,394	\$5,507	



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^{**} Source: Local Employment Household Dynamics Partnership between Alabama Department of Labor, Labor Market Information Division, and the U.S. Census Bureau, Quarterly Workforce Indicators.

^{***} Data not available due to confidentiality.

Alabama High-Tech Peripheral Concentration Quarterly Workforce Indicators

		To			et				ew				
	_	Emplo			Flows		reation	Hir			ations		ver (%)
NAICS	Industry	2008	2013	2008	2013	2008	2013	2008	2013	2008	2013	2008	2013
2111	Oil and Gas Extraction	716	579	-8	-1	14	16	24	24	35	28	4.10	5.13
2211	Electric Power Generation, Transmission and Distribution	12,632	13,529	90	-28	154	62	294	216	247	265	2.25	1.90
3241	Petroleum and Coal Products Manufacturing	1,636	1,801	-27	-14	37	22	55	45	96	61	4.28	2.88
3251	Basic Chemical Manufacturing	3,145	2,910	100	19	133	41	99	78	77	62	4.45	2.48
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing	2,212	2,876	-27	12	69	33	69	75	139	69	4.78	2.78
3254	Pharmaceutical and Medicine Manufacturing	843	1,598	39	86	43	94	84	140	47	67	7.90	6.68
3332	Industrial Machinery Manufacturing	595	459	-16	3	27	15	40	23	58	23	7.85	5.55
3333	Commercial and Service Industry Machinery Manufacturing	879	638	-30	11	15	16	38	28	72	19	6.13	3.88
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	1,508	1,431	-28	-20	9	8	28	19	59	40	2.38	2.08
3343	Audio and Video Equipment Manufacturing	***	***	0	0	0	0	0	0	0	0	0.00	0.00
3353	Electrical Equipment Manufacturing	923	1,194	0	29	78	45	46	75	104	52	8.58	5.53
4234	Commercial Equipment	3,943	3,596	1	-13	133	82	210	154	233	171	5.60	4.73
4236	Electrical Goods Wholesalers	3,729	3,061	-12	18	105	91	175	151	207	143	5.30	5.00
4242	Drugs and Druggists' Sundries Wholesalers	2,163	1,751	-15	-3	68	50	106	104	135	114	5.75	6.20
4861	Pipeline Transportation of Crude Oil	99	74	3	1	11	3	9	7	20	5	16.27	7.43
5171	Wired Telecommunications	8,827	8,075	116	98	408	225	683	463	537	384	6.88	5.20
5172	Wireless Telecommunications	1,364	1,156	-6	35	43	60	107	141	114	111	8.05	12.08
5179	Other Telecommunications	1,161	964	9	-16	54	14	100	35	94	54	8.58	4.93
5211	Monetary Authorities-Central Bank	***	***	0	-1	0	0	0	0	0	1	0.00	2.15
5416	Management, Scientific, and Technical Consulting Services	6,886	7,116	75	131	512	516	718	711	712	632	11.05	10.00
5511	Management of Companies and Enterprises	14,489	15,486	171	30	590	450	1,207	1,117	1,138	1,156	8.58	7.63

^{*}Alabama High-Tech industries were obtained from the STEM driven High-Tech Industry Taxonomy report conducted by the High-Tech Committee funded by the Workforce Information Council, January 2015.

^{**} Source: Local Employment Household Dynamics Partnership between Alabama Department of Labor, Labor Market Information Division, and the U.S. Census Bureau, Quarterly Workforce Indicators.

^{***} Data not available due to confidentiality.

Alabama
High-Tech Peripheral Concentration
Quarterly Workforce Indicators

		Aver Mon	_		rage Hire	
NAICS	Industry	2008	2013	2008	2013	
2111	Oil and Gas Extraction	\$7,048	\$8,174	\$5,793	\$7,189	
2211	Electric Power Generation, Transmission and Distribution	\$6,057	\$6,817	\$4,529	\$4,657	
3241	Petroleum and Coal Products Manufacturing	\$4,860	\$5,436	\$3,314	\$4,004	
3251	Basic Chemical Manufacturing	\$6,468	\$7,197	\$5,090	\$5,444	
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing	\$5,652	\$6,543	\$4,328	\$4,564	
3254	Pharmaceutical and Medicine Manufacturing	\$4,629	\$4,452	\$3,322	\$4,030	
3332	Industrial Machinery Manufacturing	\$3,361	\$3,825	\$2,530	\$2,428	
3333	Commercial and Service Industry Machinery Manufacturing	\$3,976	\$4,504	\$2,881	\$3,485	
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	\$4,226	\$4,386	\$5,156	\$4,635	
3343	Audio and Video Equipment Manufacturing	\$6,121	\$5,014	\$6,481	\$5,014	
3353	Electrical Equipment Manufacturing	\$3,695	\$4,331	\$2,759	\$3,775	
4234	Commercial Equipment	\$5,672	\$6,160	\$4,049	\$4,687	
4236	Electrical Goods Wholesalers	\$4,750	\$4,957	\$3,208	\$3,325	
4242	Drugs and Druggists' Sundries Wholesalers	\$6,885	\$6,579	\$4,530	\$5,618	
4861	Pipeline Transportation of Crude Oil	\$4,982	\$5,734	\$4,576	\$4,694	
5171	Wired Telecommunications	\$4,706	\$5,712	\$3,338	\$3,647	
5172	Wireless Telecommunications	\$3,701	\$3,745	\$2,781	\$3,058	
5179	Other Telecommunications	\$4,795	\$5,158	\$3,703	\$4,141	
5211	Monetary Authorities-Central Bank	\$6,823	\$9,133	\$3,261	\$10,298	
5416	Management, Scientific, and Technical Consulting Services	\$4,744	\$5,119	\$3,882	\$3,947	
5511	Management of Companies and Enterprises	\$4,066	\$4,607	\$2,794	\$2,995	



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^{***} Data not available due to confidentiality.

Core and Peripheral High-Tech Industries



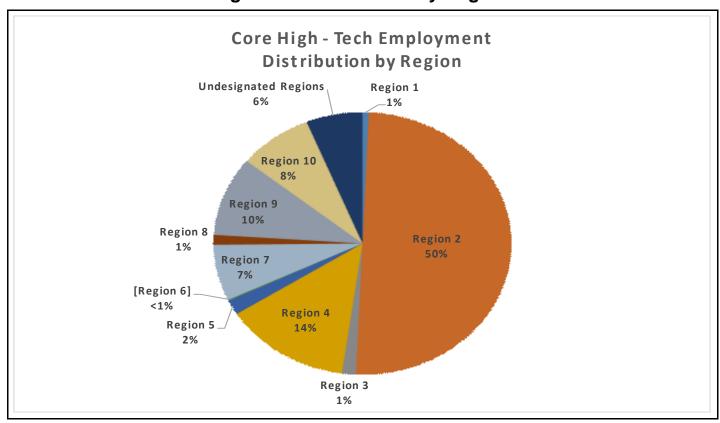
Core High-Tech Industries

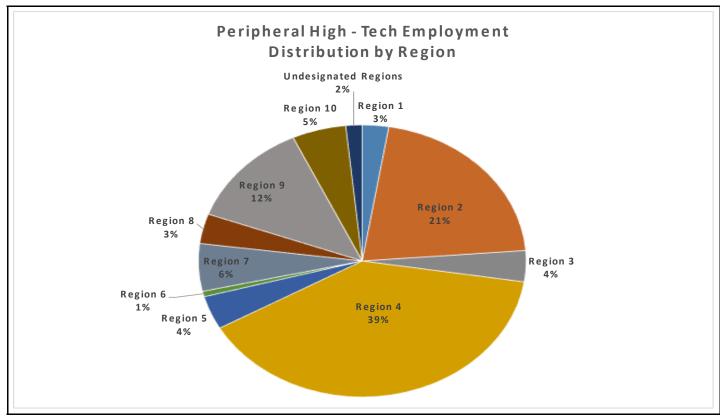


Peripheral High-Tech Industries



High-Tech Distribution by Region





^{*}Alabama High-Tech industries were obtained from the STEM driven High-Tech Industry Taxonomy report conducted by the High-Tech Committee funded by the Workforce Information Council, January 2015.

^{**} Source: Local Employment Household Dynamics Partnership between Alabama Department of Labor, Labor Market Information Division, and the U.S. Census Bureau, Quarterly Workforce Indicators.

^{***} Data not available due to confidentiality.

Alabama Core High-Tech Location Quotients

		Alabama Annual Average Employment		Annual Employment	Percent of Employ		Alabama's Location Quotient		
NAICS	Industry	2008	2013	Change	2008	2013	2008	2013	
	Total Wage and Salary Employment	1,936,283	1,845,030	-91,253					
3341	Computer and Peripheral Equipment Manufacturing	3,844	1,805	-2,039	0.20%	0.10%	1.46	0.84	
3342	Communications Equipment Manufacturing	1,995	1,849	-146	0.10%	0.10%	1.09	1.32	
3344	Semiconductor & Other Electronic Component Manufacturing	2,179	1,538	-641	0.11%	0.08%	0.35	0.30	
3345	Electronic instruments Manufacturing	2,589	2,205	-384	0.13%	0.12%	0.41	0.41	
3364	Aerospace Product and Parts Manufacturing	14,051	13,370	-681	0.73%	0.72%	1.95	1.95	
5112	Software Publishers	392	769	377	0.02%	0.04%	0.10	0.19	
5182	Data Processing	1,130	1,255	125	0.06%	0.07%	0.30	0.34	
5191	Other Information Services	1,062	1,083	21	0.05%	0.06%	0.55	0.40	
5413	Architectural, Engineering , and Related Services	23,798	21,973	-1,825	1.23%	1.19%	1.15	1.19	
5415	Computer Systems Design and Related Services	16,865	22,018	5,153	0.87%	1.19%	0.81	0.94	
5417	Scientific Research and Development Services	5,074	5,071	-4	0.26%	0.27%	0.57	0.58	

^{*}Alabama High-Tech industries were obtained from the STEM driven High-Tech Industry Taxonomy report conducted by the High-Tech Committee funded by the Workforce Information Council, January 2015.

Note: Location quotients compare the local share of a given industry to the share of that industry for a larger area. This concept measures the relative specialization and concentration of an industry in Alabama compared to the nation.

When LQ = 1, local production for the respective industry is assumed to be sufficient to meet local demand.

When LQ < 1, local production is assumed to be insufficient to meet local demand which would likely result in a greater number of imports to fulfill demand in the respective industry.

When LQ > 1, local production for the respective industry is assumed to be in excess for the local demand and will likely result in a larger number of exports to fulfill demand in other areas of the nation or the world.

Alabama Peripheral High-Tech Location Quotients

		Alabama Ann Emplo	_	Annual Employment	Percent of Alabama Employment		Alabama's Location Quotien	
NAICS	Industry	2008	2013	Change	2008	2013	2008	2013
	Total Wage and Salary Employment	1,936,283	1,845,030	-91,253.00				
2111	Oil and Gas Extraction	716	579	-136.75	0.04%	0.03%	0.31	0.21
2211	Electric Power Generation, Transmission and Distribution	12,632	13,529	896.50	0.65%	0.73%	2.18	2.52
3241	Petroleum and Coal Products Manufacturing	1,636	1,801	165.25	0.08%	0.10%	0.98	1.17
3251	Basic Chemical Manufacturing	3,145	2,910	-235.75	0.16%	0.16%	1.43	1.48
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibers & Filaments Manufacturing	2,212	2,876	664.00	0.11%	0.16%	1.50	2.29
3254	Pharmaceutical and Medicine Manufacturing	843	1,598	755.75	0.04%	0.09%	0.20	0.42
3332	Industrial Machinery Manufacturing	595	459	-135.75	0.03%	0.02%	0.34	0.31
3333	Commercial and Service Industry Machinery Manufacturing	879	638	-241.75	0.05%	0.03%	0.58	0.53
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing	1,508	1,431	-77.25	0.08%	0.08%	1.01	1.05
3343	Audio and Video Equipment Manufacturing	***	***	0.00	- %	- %	0.00	0.00
3353	Electrical Equipment Manufacturing	923	1,194	270.50	0.05%	0.06%	0.41	0.60
4234	Commercial Equipment	3,943	3,596	-347.00	0.20%	0.19%	0.42	0.42
4236	Electrical Goods Wholesalers	3,729	3,061	-668.25	0.19%	0.17%	0.74	0.70
4242	Drugs and Druggists' Sundries Wholesalers	2,163	1,751	-412.00	0.11%	0.09%	0.73	0.67
4861	Pipeline Transportation of Crude Oil	99	74	-25.00	0.01%	- %	0.82	0.53
5171	Wired Telecommunications	8,827	8,075	-752.25	0.46%	0.44%	0.92	0.97
5172	Wireless Telecommunications	1,364	1,156	-208.25	0.07%	0.06%	0.47	0.55
5179	Other Telecommunications	1,161	964	-197.00	0.06%	0.05%	0.58	0.83
5211	Monetary Authorities-Central Bank	***	***	0.00	- %	- %	0.00	0.13
5416	Management, Scientific, and Technical Consulting Services	6,886	7,116	230.25	0.36%	0.39%	0.47	0.44
5511	Management of Companies and Enterprises	14,489	15,486	997.25	0.75%	0.84%	0.53	0.54

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Note: Location quotients compare the local share of a given industry to the share of that industry for a larger area. This concept measures the relative specialization and concentration of an industry in Alabama compared to the nation.

When LQ = 1, local production for the respective industry is assumed to be sufficient to meet local demand.

When LQ < 1, local production is assumed to be insufficient to meet local demand which would likely result in a greater number of imports to fulfill demand in the respective industry.

When LQ > 1, local production for the respective industry is assumed to be in excess for the local demand and will likely result in a larger number of exports to fulfill demand in other areas of the nation or the world.

Alabama High-Tech Industry Projections

			y Projections			
		Alabama Anr Emplo	nual Average syment	Net	Percent	Average Annual
NAICS	Industry	2012	2022	Change	Change (%)	Growth (%)
	Total Wage and Salary Employment	1,871,810	2,079,850	213,220	10.39	0.99
2111	Oil and Gas Extraction	760	950	190	25.00	2.26
2211	Electric Power Generation, Transmission & Distribution	570	550	-20	-3.51	-0.36
	Petroleum and Coal Products Manufacturing	640	630	-10	-1.56	-0.16
3251	Basic Chemical Manufacturing	1,540	3,210	1,670	108.44	7.62
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibers & Filaments Manufacturing	2,040	1,580	-460	-22.55	-2.52
3254	Pharmaceutical and Medicine Manufacturing	2,090	1,660	-430	-20.57	-2.28
3332	Industrial Machinery Manufacturing	2,000	1,980	-20	-1.00	-0.10
	Commercial and Service Industry Machinery Manufacturing	2,980	2,870	-110	-3.69	-0.38
	Engine, Turbine, and Power Transmission Equipment Manufacturing	2,850	2,830	-20	-0.70	-0.07
3341	Computer and Peripheral Equipment Manufacturing	1,280	1,510	230	17.97	1.67
3342	Communications Equipment Manufacturing	12,070	11,650	-420	-3.48	-0.35
3343	Audio and Video Equipment Manufacturing	***	***	0	0.00	0.00
3344	Semiconductor and Other Electronic Component Manufacturing	1,680	1,600	-80	-4.76	-0.49
3345	Electronic instruments Manufacturing	2,200	2,520	320	14.55	1.37
3353	Electrical Equipment Manufacturing	1,160	1,070	-90	-7.76	-0.80
3364	Aerospace Product and Parts Manufacturing	12,510	14,030	1,520	12.15	1.15
4234	Commercial Equipment	3,840	4,130	290	7.55	0.73
4236	Electrical Goods Wholesalers	3,170	2,880	-290	-9.15	-0.95
4242	Drugs and Druggists' Sundries Wholesalers	1,950	1,890	-60	-3.08	-0.31
4861	Pipeline Transportation of Crude Oil	80	70	-10	-12.50	-1.33
5112	Software Publishers	790	1,000	210	26.58	2.39
5171	Wired Telecommunications	8,160	7,320	-840	-10.29	-1.08
5172	Wireless Telecommunications	1,020	1,160	140	13.73	1.29
5179	Other Telecommunications	1,070	990	-80	-7.48	-0.77
5182	Data Processing	1,390	1,365	-25	-1.80	-0.18
5191	Other Information Services	488	551	63	12.91	1.22
5211	Monetary Authorities-Central Bank	***	***	0	0.00	0.00
5413	Architectural, Engineering , & Related Services	24,640	29,600	4,960	20.13	1.85
5415	Computer Systems Design and Related Services	22,290	30,510	8,220	36.88	3.19
5416	Management, Scientific, & Technical Consulting Services	8,050	11,070	3,020	37.52	3.24
5417	Scientific Research & Development Services	5,560	6,600	1,040	18.71	1.73
5511	Management of Companies & Enterprises	16,860	17,450	590	3.50	0.34

^{*}Alabama High-Tech industries were obtained from the STEM driven High-Tech Industry Taxonomy report conducted by the High-Tech Committee funded by the Workforce Information Council, January 2015.

^{**} This data is developed and provided by the Alabama Department of Labor, Labor Market Information Division in cooperation with the Projections Managing Partnership of the U.S. Department of Labor, Employment and Training Administration.

^{***} Data not available due to confidentiality.

Alabama
High-Tech Occupations
Statewide Projections and Wages

		E	Employ	/ment Percent	Ave	erage An Openir		Annual Salary (\$)			
soc	Occupations	2012	2022	Change (%)	Total	-	Replacement	Entry	Mean	Experience	
	Computer and Information Systems Managers	2,930	3,500	19.47	100	55	40	76,798	121,149	143,324	
	Architectural and Engineering Managers		2,990	7.80	90	20	70	95,333	133,742	152,947	
11-9121	Natural Sciences Managers	***	***	1.09	5	0	5	80,560	114,487	131,451	
	Computer and Information Research Scientists	320	360	13.25	10	5	5	68,727	102,928	120,034	
15-1121 (Computer Systems Analysts	5,840	7,400	26.58	245	155	90	56,204	80,813	93,123	
15-1122 I	Information Security Analysts	1,030	1,360	31.95	50	35	15	58,780	83,429	95,749	
15-1131 (Computer Programmers	5,160	5,670	9.95	185	50	135	52,240	82,385	97,463	
15-1132	Software Developers, Applications	3,740	4,630	23.82	135	90	50	61,659	94,471	110,888	
	Software Developers, Systems Software	3,430	4,180	21.82	120	75	45	66,618	99,724	116,282	
15-1134 \	Web Developers	860	1,040	21.05	30	20	15	33,522	53,994	64,225	
15-1141	Database Administrators	1,850	2,140	15.49	65	30	35	47,667	73,766	86,816	
	Network and Computer Systems Administrators	4,920	5,520	12.20	135	60	75	47,565	70,501	81,969	
	Computer Network Architects	760	860	14.15	25	10	10	64,093	91,632	105,402	
15-1151 (Computer User Support Specialists	7,390	9,310	25.85	305	190	115	29,050	46,298	54,917	
15-1152 (Computer Network Support Specialists	1,530	1,770	15.87	50	25	25	34,110	55,332	65,938	
15-1199(Computer Occupations, All Other	1,790	1,690	-5.80	30	0	30	64,458	86,086	96,895	
15-2011	Actuaries	40	50	20.51	0	0	0	52,230	91,075	110,492	
15-2021 N	Mathematicians	***	***	8.33	0	0	0	66,537	89,158	100,464	
15-2031 (Operations Research Analysts	740	910	22.97	35	15	15	58,790	91,855	108,383	
15-2041	Statisticians	240	300	25.00	15	5	10	37,659	56,843	66,435	
17-1021 (Cartographers and Photogrammetrists	540	600	11.96	15	5	10	44,290	63,241	72,712	
17-1022	Surveyors	580	630	8.61	15	5	10	32,285	53,984	64,833	
17-2011	Aerospace Engineers	3,250	3,700	13.71	120	45	75	71,627	107,724	125,773	
17-2021	Agricultural Engineers	20	10	-6.67	0	0	0	66,040	86,502	96,733	
17-2031 E	Biomedical Engineers	***	***	6.25	0	0	0	62,177	83,612	94,340	
17-2041 (Chemical Engineers	530	590	11.11	20	5	10	71,008	96,205	108,799	
17-2051 (Civil Engineers	3,850	4,400	14.41	150	55	95	47,616	73,989	87,181	
17-2061 (Computer Hardware Engineers	1,290	1,410	9.32	40	10	30	75,662	106,882	122,498	
17-2071 E	Electrical Engineers	4,130	4,590	11.29	135	45	90	65,006	94,482	109,215	
	Electronics Engineers, Except Computer	1,890	1,980	4.92	50	10	40	67,743	101,143	117,843	
	Environmental Engineers	910	1,020	12.35	35	10	20	47,788	76,453	90,791	
	Health and Safety Engineers, Except Mining Safety Engineers & Inspectors	430	450	6.07	15	5	10	65,350	93,620	107,765	
	Industrial Engineers	3,760	4,220	12.35	155	45	110	60,321	85,113	97,513	

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Alabama
High-Tech Occupations
Statewide Projections and Wages

			Employ	ment		erage Ani	nual loh			
	-			Percent	AV	Openir		A	Annual Sa	lary (\$)
soc	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
17-2121	Marine Engineers and Naval Architects	150	170	12.16	5	0	5	52,716	58,861	61,933
17-2131	Materials Engineers	420	430	2.14	15	0	15	70,167	100,636	115,876
17-2141	Mechanical Engineers	3,250	3,630	11.57	150	40	110	61,234	85,386	97,463
17-2151	Mining & Geological Engineers,	240	270	12.76	10	5	5	56,762	90,659	107,613
17-2161	Including Mining Safety Engineers Nuclear Engineers	***	***	-0.85	5	0	5	***	***	***
17-2171	Petroleum Engineers	***	***	20.31	5	0	0	66,841	134,533	168,370
17-2199	Engineers, All Other	4,590	4,490	-2.03	85	0	85	72,012	111,871	131,796
17-3011	Architectural and Civil Drafters	1,240	1,230	-0.57	15	0	15	35,955	50,120	57,208
17-3012	Electrical and Electronics Drafters	480	520	8.07	10	5	5	40,904	64,063	75,632
17-3013	Mechanical Drafters	730	760	3.54	15	5	10	34,870	55,018	65,097
17-3019	Drafters, All Other	300	360	20.61	10	5	5	30,642	42,718	48,762
17-3021	Aerospace Engineering and Operations Technicians	230	270	17.62	10	5	5	36,797	59,611	71,018
17-3022	Civil Engineering Technicians	600	610	1.84	15	0	10	26,089	36,118	41,127
17-3023	Electrical and Electronics Engineering Technicians	1,990	2,150	7.94	55	15	40	39,504	60,280	70,674
17-3024	Electro-Mechanical Technicians	60	60	5.36	0	0	0	42,637	53,801	59,388
17-3025	Environmental Engineering Technicians	730	860	17.92	30	15	15	34,698	52,564	61,487
17-3026	Industrial Engineering Technicians	890	970	8.74	25	10	20	37,740	55,961	65,077
17-3027	Mechanical Engineering Technicians	580	680	15.75	20	10	10	33,147	53,375	63,495
17-3029	Engineering Technicians, Except Drafters, All Other	720	720	-0.97	15	0	15	42,566	63,647	74,182
17-3031	Surveying and Mapping Technicians	1,030	1,160	12.48	30	15	20	24,609	39,119	46,369
19-1011	Animal Scientists	***	***	0.00	0	0	0	***	***	***
19-1012	Food Scientists and Technologists	170	170	4.82	5	0	5	38,166	69,132	84,626
19-1013	Soil and Plant Scientists	140	150	5.56	5	0	5	43,337	60,179	68,595
19-1021	Biochemists and Biophysicists	***	***	0.00	0	0	0	53,578	90,020	108,241
19-1022	Microbiologists	190	200	5.88	5	0	5	39,241	72,093	88,509
19-1023	Zoologists and Wildlife Biologists	110	110	0.93	5	0	5	41,634	60,199	69,477
19-1029	Biological Scientists, All Other	***	***	0.00	5	0	5	47,281	66,344	75,885
19-1031	Conservation Scientists	110	100	-6.36	5	0	5	50,861	71,201	81,381
19-1032	Foresters	220	240	8.80	10	0	5	37,375	57,969	68,271
19-1041	Epidemiologists	40	50	2.27	0	0	0	47,474	59,966	66,212
19-1042	Medical Scientists, Except Epidemiologists	130	140	11.81	5	0	5	40,255	50,364	55,424
19-1099	Life Scientists, All Other	130	130	0.00	5	0	5	40,062	80,692	101,012
19-2011	Astronomers	***	***	4.35	0	0	0	***	***	***
19-2012	Physicists	190	200	6.95	5	0	5	66,344	123,157	151,558
19-2021	Atmospheric and Space Scientists	120	130	8.55	5	0	5	53,882	80,245	93,427
19-2031	Chemists	750	800	7.79	25	5	20	47,484	76,027	90,304

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Alabama High-Tech Occupations Statewide Projections and Wages

							aval lab			
		- 1	Employ		AV	erage Anı Openir		Δ	nnual Sa	lary (\$)
soc	Occupations	2012	2022	Percent Change (%)	Total	-	Replacement	Entry	Mean	Experience
19-2032	Materials Scientists	***	***		5	0	0	45,375	76,088	91,440
19-2041	Environmental Scientists and Specialists, Including Health	1,170	1,290	9.55	45	10	35	39,058	60,169	70,724
	Geoscientists, Except Hydrologists and Geographers	310	370		15	5	10	44,057	73,290	87,911
19-2043	Hydrologists	10	10	-11.11	0	0	0	73,584	86,877	93,528
19-2099	Physical Scientists, All Other	210	220	4.29	5	0	5	33,755	72,641	92,089
19-4011	Ag and Food Science Technicians	180	180	1.12	5	0	5	29,598	44,280	51,631
19-4021	Biological Technicians	1,040	1,140	10.02	40	10	30	24,913	38,166	44,787
19-4031	Chemical Technicians	970	1,070	10.07	35	10	25	29,577	47,484	56,427
19-4041	Geological and Petroleum Technicians	50	60	28.26	5	0	0	41,836	60,656	70,065
19-4051	Nuclear Technicians	70	70	0.00	5	0	5	36,107	60,747	73,067
19-4091	Environmental Science & Protection Technicians, Including Health	600	700	16.61	35	10	25	31,200	47,079	55,018
19-4092	Forensic Science Technicians	80	80	5.00	5	0	5	33,339	57,370	69,396
19-4093	Forest and Conservation Technicians	240	240	-0.42	10	0	10	32,001	42,779	48,164
19-4099	Life, Physical, and Social Science Technicians, All Other	440	470	6.38	20	5	15	23,879	39,869	47,869
	Computer Science Teachers, Postsecondary	***	***	11.97	15	5	10	46,440	88,144	108,992
	Mathematical Science Teachers, Postsecondary	750			20	10	10	37,963	66,080	80,134
	Engineering Teachers, Postsecondary	560			15	5	10	70,359	112,845	134,087
	Agricultural Sciences Teachers, Postsecondary	190			5	0	5	63,606	94,076	109,306
	Biological Science Teachers, Postsecondary		2,460		100	75	25	***	***	***
	Forestry and Conservation Science Teachers, Postsecondary	***	***	6.67	0	0	0	61,274	92,809	108,586
	Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary	70			0	0	0	54,065	95,120	115,653
	Chemistry Teachers, Postsecondary	260	290		5	5	5	44,168	75,226	90,760
	Environmental Science Teachers, Postsecondary	30			0	0	0	45,111	73,837	88,195
	Physics Teachers, Postsecondary	180			5	0	5	50,435	84,028	100,829
41-4011	Sales Reps, Wholesale & Manufacturing, Technical & Scientific Products	***	***	12.80	40	15	25	39,943	85,429	108,177
41-9031	Sales Engineers	220	230	2.73	5	0	5	66,023	104,499	123,737

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Alabama
High-Tech Occupations
Region 1 Projections and Wages

			Emplo	yment		erage Ann	ual lob			
			Lilipio	Percent	Αντ	Opening		Δ	nnual Sala	arv (\$)
soc	Occupations	2012	2022	Change (%)	Total	Growth R	Replacement	Entry	Mean	Experience
11-3021	Computer and Information Systems Managers	30	40	23.53	0	0	0	58,401	98,461	118,491
11-9041	Architectural and Engineering Managers	50	60	11.54	0	0	0	78,986	101,224	112,342
15-1121	Computer Systems Analysts	40	50	25.58	0	0	0	***	***	***
15-1122	Information Security Analysts	10	20	36.36	0	0	0	***	***	***
15-1131	Computer Programmers	50	50	4.26	0	0	0	45,888	57,968	64,008
15-1132	Software Developers, Applications	***	***	16.00	0	0	0	***	***	***
15-1133	Software Developers, Systems Software	10	10	18.18	0	0	0	61,239	110,700	135,431
15-1134	Web Developers	10	20	28.57	0	0	0	***	***	***
15-1141	Database Administrators	20	20	12.50	0	0	0	40,234	56,694	64,925
15-1142	Network and Computer Systems Administrators	170	180	5.99	5	0	5	44,350	66,008	76,837
15-1143	Computer Network Architects	***	***	0.00	0	0	0	***	***	***
15-1151	Computer User Support Specialists	210	230	9.57	5	0	5	23,006	33,994	39,489
15-1152	Computer Network Support Specialists	20	20	10.00	0	0	0	31,857	46,703	54,126
15-1199	Computer Occupations, All Other	10	10	0.00	0	0	0	***	***	***
17-1021	Cartographers and Photogrammetrists	***	***	0.00	0	0	0	***	***	***
17-1022	Surveyors	20	20	0.00	0	0	0	33,307	54,488	65,078
17-2041	Chemical Engineers	40	50	38.46	5	0	0	84,862	103,998	113,567
17-2051	Civil Engineers	120	130	8.47	5	0	5	44,092	69,302	81,908
17-2071	Electrical Engineers	60	60	6.67	0	0	0	67,867	95,076	108,681
17-2072	Electronics Engineers, Except Computer	***	***	0.00	0	0	0	63,163	76,745	83,535
17-2081	Environmental Engineers	***	***	28.57	0	0	0	58,540	73,739	81,338
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	10	10	0.00	0	0	0	64,101	83,185	92,729
17-2112	Industrial Engineers	140	150	3.55	5	0	5	60,717	83,532	94,939
17-2131	Materials Engineers	***	***	0.00	0	0	0	***	***	***
17-2141	Mechanical Engineers	150	200	2.65	10	5	5	57,583	81,078	92,825
17-2199	Engineers, All Other	110	120	2.68	0	0	0	37,971	78,039	98,072
17-3011	Architectural and Civil Drafters	50	40	-2.22	0	0	0	32,783	43,312	48,576
17-3012	Electrical and Electronics Drafters	10	10	-14.29	0	0	0	41,184	55,252	62,286
17-3013	Mechanical Drafters	60	50	-7.02	0	0	0	25,496	36,879	42,571
17-3019	Drafters, All Other	***	***	33.33	0	0	0	***	***	***
17-3022	Civil Engineering Technicians	***	***	-5.56	0	0	0	27,561	36,608	41,131
17-3023	Electrical and Electronics Engineering Technicians	20	20	4.55	0	0	0	44,924	61,249	69,410

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Alabama High-Tech Occupations Region 1 Projections and Wages

			Emplo	yment	Ave	erage An	nual Job			
			•	Percent		Openii		Α	nnual Sal	lary (\$)
soc	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
17-3025	Environmental Engineering Technicians	***	***	10.53	0	0	0	***	***	***
17-3026	Industrial Engineering Technicians	50	50	2.08	0	0	0	35,223	58,656	70,373
17-3027	Mechanical Engineering Technicians	20	40	63.16	0	0	0	53,903	61,722	65,631
17-3029	Engineering Technicians, Except Drafters, All Other	***	***	-14.29	0	0	0	50,117	62,876	69,255
17-3031	Surveying and Mapping Technicians	30	30	7.69	0	0	0	21,413	31,965	37,242
19-1012	Food Scientists and Technologists	10	10	9.09	0	0	0	***	***	***
19-1013	Soil and Plant Scientists	10	10	0.00	0	0	0	***	***	***
19-1031	Conservation Scientists	10	10	-18.18	0	0	0	***	***	***
19-1032	Foresters	10	10	20.00	0	0	0	***	***	***
19-2031	Chemists	30	30	7.69	0	0	0	43,907	65,773	76,706
19-2041	Environmental Scientists and Specialists, Including Health	30	30	-7.14	0	0	0	47,951	67,698	77,570
19-4011	Agricultural and Food Science Technicians	10	10	0.00	0	0	0	***	***	***
19-4031	Chemical Technicians	70	80	20.59	5	0	0	24,365	35,743	41,432
19-4091	Environmental Science and Protection Technicians, Including Health	10	10	20.00	0	0	0	***	***	***
19-4093	Forest and Conservation Technicians	30	30	-6.67	0	0	0	32,246	42,823	48,111
19-4099	Life, Physical, and Social Science Technicians, All Other	***	***	-8.33	0	0	0	***	***	***
25-1021	Computer Science Teachers, Postsecondary	***	***	11.11	0	0	0	57,056	64,532	68,270
25-1022	Mathematical Science Teachers, Postsecondary	***	***	3.23	0	0	0	40,782	54,182	60,880
25-1032	Engineering Teachers, Postsecondary	***	***	7.14	0	0	0	***	***	***
25-1042	Biological Science Teachers, Postsecondary	***	***	11.54	0	0	0	47,904	61,870	68,853
25-1052	Chemistry Teachers, Postsecondary	***	***	0.00	0	0	0	***	***	***
25-1054	Physics Teachers, Postsecondary	***	***	0.00	0	0	0	***	***	***
41-4011	Sales Reps, Wholesale & Manufacturing, Technical & Scientific Products	20	20	15.79	0	0	0	***	***	***

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Alabama
High-Tech Occupations
Region 2 Projections and Wages

			Employ	ment Percent	Ave	erage An Openii		Aı	nnual Salary (\$)
soc	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean Experience
11-3021	Computer and Information Systems Managers	1,080	1,310	21.67	40	25	15	90,100	137,803 161,654
11-9041	Architectural and Engineering Managers	1,160	1,260	8.52	40	10	30	101,094	142,934 163,854
11-9121	Natural Sciences Managers	70	70	5.71	0	0	0	71,400	120,778 145,467
15-1111	Computer and Information Research Scientists	280	310	13.41	10	5	5	72,362	109,444 127,985
15-1121	Computer Systems Analysts	2,660	3,390	27.38	115	75	40	62,526	89,965 103,685
15-1122	Information Security Analysts	260	380	49.80	15	15	5	59,794	85,949 99,027
15-1131	Computer Programmers	1,570	1,760	12.20	60	20	40	61,662	91,800 106,868
15-1132	Software Developers, Applications	2,010	2,470	23.03	70	45	25	64,870	99,184 116,343
15-1133	Software Developers, Systems Software	2,120	2,510	18.75	65	40	25	72,136	108,146 126,151
15-1134	Web Developers	180	220	20.22	5	5	5	38,848	59,780 70,247
15-1141	Database Administrators	350	440	24.08	15	10	5	50,682	72,793 83,848
15-1142	Network and Computer Systems Administrators	990	1,160	17.21	35	15	15	50,537	79,661 94,224
15-1143	Computer Network Architects	220	270	25.35	10	5	5	62,211	92,057 106,980
15-1151	Computer User Support Specialists	2,040	2,670	30.43	95	60	30	30,713	47,375 55,704
15-1152	Computer Network Support Specialists	520	610	17.02	15	10	10	37,063	54,390 63,053
15-1199	Computer Occupations, All Other	590	530	-8.72	10	0	10	65,951	93,306 106,984
15-1021	Mathematicians	***	***	0.00	0	0	0	***	*** ***
15-2031	Operations Research Analysts	450	530	16.30	15	5	10	68,801	101,605 118,007
15-2041	Statisticians	***	***	40.00	0	0	0	38,261	57,153 66,600
17-1021	Cartographers and Photogrammetrists	390	440	12.98	15	5	10	44,672	63,433 72,813
17-1022	Surveyors	130	140	7.46	5	0	5	34,704	51,406 59,757
17-2011	Aerospace Engineers	3,200	3,550	11.14	110	35	75	76,247	111,199 128,675
17-2041	Chemical Engineers	***	***	16.00	10	5	5	66,632	90,761 102,825
17-2051	Civil Engineers	670	770	15.55	25	10	15	52,773	80,859 94,900
17-2061	Computer Hardware Engineers	1,120	1,190	6.42	30	5	25	80,152	110,623 125,857
17-2071	Electrical Engineers	1,810	1,980	9.70	55	20	40	70,547	100,258 115,114
17-2072	Electronics Engineers, Except Computer	1,230	1,270	3.26	30	5	25	69,506	105,348 123,268
17-2081	Environmental Engineers	240	270	11.76	10	5	5	61,121	89,813 104,159
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	180	190	4.35	5	0	5	79,705	105,888 118,980
17-2112	Industrial Engineers	1,040	1,180	13.91	45	15	30	64,685	93,007 107,168
17-2131	Materials Engineers	320	310	-2.82	10	0	10	78,568	106,902 121,068
17-2141	Mechanical Engineers	1,390	1,570	12.49	65	15	50	66,135	92,246 105,302
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	80	100	27.85	5	0	0	44,845	59,460 66,768

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Alabama High-Tech Occupations Region 2 Projections and Wages

	Employment Average Annual Job											
			Employ		AV	rage An Openir		Δ	nnual Sal	arv (\$)		
soc	Occupations	2012	2022	Percent Change (%)	Total		Replacement	Entry		Experience		
17-2161	Nuclear Engineers	***	***	-3.73	5	0	5	94,921		151,796		
	_	3,330	3,050	-8.32	60	0	60	75,999	115,458	135,188		
	Architectural and Civil Drafters	240	240	-2.07	5	0	5	36,564	50,720	57,797		
17-3012	Electrical and Electronics Drafters	210	210	0.00	5	0	5	50,282	74,073	85,968		
17-3013	Mechanical Drafters	240	250	4.18	5	0	5	39,508	63,133	74,945		
17-3019	Drafters, All Other	70	80	16.42	0	0	0	29,474	41,724	47,848		
17-3021	Aerospace Engineering and Operations Technicians	210	240	16.59	5	5	5	42,829	62,510	72,351		
17-3022	Civil Engineering Technicians	90	100	5.56	0	0	0	23,986	33,835	38,759		
17-3023	Electrical and Electronics Engineering Technicians	1,170	1,290	10.24	35	10	25	37,678	57,080	66,781		
17-3024	Electro-Mechanical Technicians	40	40	2.56	0	0	0	44,495	55,974	61,713		
17-3025	Environmental Engineering Technicians	410	480	18.27	15	5	10	36,497	52,856	61,036		
17-3026	Industrial Engineering Technicians	330	350	7.29	10	0	5	41,243	59,324	68,365		
17-3027	Mechanical Engineering Technicians	290	350	20.07	10	5	5	34,853	55,128	65,266		
	Engineering Technicians, Except Drafters, All Other	390	360	-6.98	10	0	10	43,591	69,164	81,951		
17-3031	Surveying and Mapping Technicians	160	180	11.32	5	0	5	23,696	35,800	41,851		
19-1012	Food Scientists and Technologists	50	50	2.00	0	0	0	***	***	***		
19-1013	Soil and Plant Scientists	30	30	3.85	0	0	0	36,748	57,170	67,381		
19-1022	Microbiologists	***	***	11.11	0	0	0	***	***	***		
19-1029	Biological Scientists, All Other	30	30	4.00	0	0	0	47,942	61,857	68,815		
19-1031	Conservation Scientists	***	***	-6.67	0	0	0	63,546	80,822	89,459		
19-1032	Foresters	***	***	19.35	0	0	0	***	***	***		
19-1041	Epidemiologists	***	***	0.00	0	0	0	***	***	***		
19-1042	Medical Scientists, Except Epidemiologists	***	***	20.00	0	0	0	***	***	***		
19-1099	Life Scientists, All Other	***	***	0.00	0	0	0	***	***	***		
19-2011	Astronomers	***	***	2.13	0	0	0	***	***	***		
19-2012	Physicists	110	110	-3.64	5	0	5	85,418	•	132,413		
19-2021	Atmospheric and Space Scientists	70	80	10.29	5	0	0	***	***	***		
19-2031	Chemists	250	280	9.96	10	0	5	48,111	79,095	94,587		
19-2032	Materials Scientists	***	***	16.67	0	0	0	***	***	***		
	Environmental Scientists and Specialists, Including Health	280	320	11.62	10	5	10	43,754	72,167	86,373		
19-2042	Geoscientists, Except Hydrologists and Geographers	80	90	14.63	5	0	0	38,005	64,843	78,261		
	Physical Scientists, All Other	***	***	7.41	5	0	5	79,954		132,691		
19-4011	Agricultural and Food Science Technicians	40	40	-5.41	0	0	0	***	***	***		
19-4021	Biological Technicians	30	30	6.25	0	0	0	24,142	30,453	33,608		
19-4031	Chemical Technicians	290	320	10.84	10	5	5	31,960	47,950	55,945		

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Alabama High-Tech Occupations Region 2 Projections and Wages

		E	Employ	ment	Ave	erage Anı	nual Job			
				Percent		Openir	ngs	Aı	nnual Sa	lary (\$)
SOC	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
19-4051	Nuclear Technicians	***	***	-13.04	0	0	0	***	***	***
19-4091	Environmental Science and Protection Technicians, Including Health	***	***	16.13	5	0	5	35,669	56,575	67,027
19-4092	Forensic Science Technicians	20	20	6.67	0	0	0	38,078	42,895	45,305
19-4093	Forest and Conservation Technicians	20	10	-6.67	0	0	0	30,785	43,875	50,420
19-4099	Life, Physical, and Social Science Technicians, All Other	110	120	0.87	5	0	5	23,713	38,042	45,207
25-1021	Computer Science Teachers, Postsecondary	70	80	14.08	0	0	0	49,136	90,051	110,508
25-1022	Mathematical Science Teachers, Postsecondary	150	170	12.42	5	0	0	28,868	56,933	70,966
25-1032	Engineering Teachers, Postsecondary	***	***	17.24	0	0	0	76,366	102,982	116,290
25-1042	Biological Science Teachers, Postsecondary	100	120	20.41	5	0	0	34,059	63,789	78,654
25-1051	Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary	***	***	17.39	0	0	0	50,458	82,111	97,938
25-1052	Chemistry Teachers, Postsecondary	40	50	18.18	0	0	0	52,056	77,760	90,613
25-1054	Physics Teachers, Postsecondary	***	***	15.62	0	0	0	61,828	90,259	104,475
41-4011	Sales Reps, Wholesale & Manufacturing, Technical & Scientific Products	320	360	13.75	15	10	5	49,711	93,907	116,005
41-9031	Sales Engineers	90	100	9.68	5	0	0	79,311	115,089	132,977

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Alabama
High-Tech Occupations
Region 3 Projections and Wages

			Emplo	yment	Av	erage An	nual Job			
			-	Percent		Openir	ngs	Α	nnual Sal	ary (\$)
SOC	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
11-3021	Computer and Information Systems Managers	60	60	12.73	0	0	0	64,901	110,356	133,084
11-9041	Architectural and Engineering Managers	80	90	11.84	5	0	0	98,733	155,714	184,204
11-9121	Natural Sciences Managers	***	***	0.00	0	0	0	***	***	***
15-1121	Computer Systems Analysts	100	140	32.04	5	5	0	56,990	83,860	97,295
15-1122	Information Security Analysts	20	30	25.00	0	0	0	***	***	***
15-1131	Computer Programmers	190	200	8.56	5	0	5	52,277	79,307	92,822
15-1132	Software Developers, Applications	60	80	32.76	5	0	0	59,480	92,338	108,766
15-1133	Software Developers, Systems Software	30	40	20.69	0	0	0	61,278	71,201	76,163
15-1134	Web Developers	70	80	20.00	0	0	0	22,967	44,901	55,868
15-1141	Database Administrators	40	40	5.26	0	0	0	33,662	55,059	65,759
	Network and Computer Systems Administrators	320	360	13.40	10	5	5	47,192	66,566	76,252
15-1143	Computer Network Architects	***	***	-8.33	0	0	0	***	***	***
15-1151	Computer User Support Specialists	130	160	21.37	5	5	0	32,795	49,586	57,981
15-1152	Computer Network Support Specialists	20	20	0.00	0	0	0	31,215	47,441	55,553
15-1199	Computer Occupations, All Other	20	20	-15.79	0	0	0	57,777	79,769	90,764
15-2031	Operations Research Analysts	10	20	28.57	0	0	0	***	***	***
17-1021	Cartographers and Photogrammetrists	***	***	8.33	0	0	0	42,670	54,006	59,675
17-1022	Surveyors	30	30	7.41	0	0	0	35,127	55,532	65,734
17-2011	Aerospace Engineers	***	***	41.67	0	0	0	***	***	***
17-2041	Chemical Engineers	***	***	-4.17	0	0	0	***	***	***
17-2051	Civil Engineers	170	200	13.37	5	0	5	49,472	74,944	87,680
17-2061	Computer Hardware Engineers	***	***	28.57	0	0	0	***	***	***
17-2071	Electrical Engineers	130	160	18.05	5	0	5	60,205	78,794	88,089
	Electronics Engineers, Except Computer	***	***	-10.26	0	0	0	62,656	84,399	95,271
17-2081	Environmental Engineers	30	40	20.69	0	0	0	43,222	55,886	62,217
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	20	20	23.53	0	0	0	43,333	63,693	73,873
17-2112	Industrial Engineers	340	480	41.64	25	15	10	61,023	78,811	87,704
17-2131	Materials Engineers	***	***	9.09	0	0	0	***	***	***
17-2141	Mechanical Engineers	70	80	9.86	5	0	0	68,773	87,269	96,517
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	40	40	-6.82	0	0	0	82,571	111,084	125,340
17-2171	Petroleum Engineers	***	***	20.00	0	0	0	67,097	137,408	172,564
17-2199	Engineers, All Other	50	50	2.13	0	0	0	***	***	***
17-3011	Architectural and Civil Drafters	70	70	-4.17	0	0	0	35,427	46,370	51,842
17-3013	Mechanical Drafters	30	30	0.00	0	0	0	30,005	41,706	47,556
17-3019	Drafters, All Other	20	20	23.53	0	0	0	24,229	41,329	49,879

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^{***} Data not available due to confidentiality.

Alabama High-Tech Occupations Region 3 Projections and Wages

			Emplo	yment	Av	erage Ann				
				Percent		Openin	_		nnual Sa	
SOC	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
17-3022	Civil Engineering Technicians	20	20	0.00	0	0	0	26,971	36,962	41,958
17-3023	Electrical and Electronics Engineering Technicians	20	20	6.67	0	0	0	39,585	53,137	59,912
17-3025	Environmental Engineering Technicians	20	20	6.67	0	0	0	***	***	***
17-3026	Industrial Engineering Technicians	100	150	44.23	5	5	0	43,164	60,840	69,678
17-3027	Mechanical Engineering Technicians	20	30	30.00	0	0	0	***	***	***
17-3031	Surveying and Mapping Technicians	60	60	14.29	0	0	0	23,712	34,207	39,453
19-1012	Food Scientists and Technologists	10	10	0.00	0	0	0	***	***	***
19-1013	Soil and Plant Scientists	10	20	15.38	0	0	0	***	***	***
19-1032	Foresters	20	20	11.11	0	0	0	33,066	51,042	60,030
19-2012	Physicists	***	***	28.57	0	0	0	***	***	***
19-2021	Atmospheric and Space Scientists	***	***	12.50	0	0	0	***	***	***
19-2031	Chemists	10	10	-7.14	0	0	0	43,219	59,880	68,211
19-2041	Environmental Scientists and Specialists, Including Health	30	30	3.70	0	0	0	34,484	49,458	56,943
	Geoscientists, Except Hydrologists and Geographers	50	70	25.00	5	0	0	42,172	63,383	73,989
19-4031	Chemical Technicians	30	30	-10.71	0	0	0	32,606	43,573	49,056
19-4041	Geological and Petroleum Technicians	20	30	31.58	0	0	0	***	***	***
19-4091	Environmental Science and Protection Technicians, Including Health	10	10	0.00	0	0	0	***	***	***
	Forest and Conservation Technicians	10	10	20.00	0	0	0	39,352	47,025	50,861
	Life, Physical, and Social Science Technicians, All Other	70	80	16.18	5	0	5	25,531	45,330	55,231
	Computer Science Teachers, Postsecondary	70	80	12.68	0	0	0	70,270	136,558	,
	Mathematical Science Teachers, Postsecondary	100	110	11.22	5	0	0	32,704	70,468	89,351
	Engineering Teachers, Postsecondary	***	***	11.21	5	0	0	***	***	***
	Biological Science Teachers, Postsecondary	70	80	16.42	0	0	0	41,635	86,640	109,142
	Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary	***	***	10.00	0	0	0	***	***	***
	Chemistry Teachers, Postsecondary	40	50	9.30	0	0	0	39,135	95,774	124,093
	Physics Teachers, Postsecondary	***	***	12.12	0	0	0	47,394	96,261	120,694
41-4011	Sales Reps, Wholesale & Manufacturing, Technical & Scientific Products	***	***	10.34	5	0	5	***	***	***

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Alabama
High-Tech Occupations
Region 4 Projections and Wages

			Emplo	yment	Av	erage An				
				Percent		Openii			Annual Sa	
SOC	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
11-3021	Computer and Information Systems Managers	940	1,120	19.64	30	20	15	82,323	123,544	144,154
	Architectural and Engineering Managers	710	750	4.91	20	5	20	101,154	137,303	155,377
11-9121	Natural Sciences Managers	30	30	4.00	0	0	0	108,692	170,312	201,123
15-1111	Computer and Information Research Scientists	20	20	0.00	0	0	0	***	***	***
15-1121	Computer Systems Analysts	2,130	2,650	24.39	85	50	35	53,743	74,219	84,456
15-1122	Information Security Analysts	720	880	23.04	25	15	10	59,819	84,026	96,130
15-1131	Computer Programmers	1,770	1,950	9.87	65	20	45	49,586	83,217	100,033
15-1132	Software Developers, Applications	1,010	1,240	22.51	35	25	15	61,317	88,720	102,421
	Software Developers, Systems Software	550	700	25.45	20	15	5	63,736	89,304	102,087
15-1134	Web Developers	330	410	22.16	10	5	5	36,860	55,660	65,061
	Database Administrators	590	640	8.83	15	5	10	52,807	79,201	92,398
	Network and Computer Systems Administrators	1,800	1,950	8.33	45	15	30	48,828	72,735	84,688
	Computer Network Architects	380	410	9.04	10	5	5	73,754	96,013	107,142
15-1151	Computer User Support Specialists	1,950	2,390	22.47	75	45	30	30,872	49,224	58,400
	Computer Network Support Specialists	420	460	8.25	10	5	5	42,779	63,463	73,806
15-1199	Computer Occupations, All Other	290	310	6.16	5	0	5	55,599	80,893	93,540
15-2011	Actuaries	30	40	24.24	0	0	0	51,450	83,966	100,224
15-2031	Operations Research Analysts	140	170	19.57	5	5	5	51,261	84,436	101,022
15-2041	Statisticians	80	100	23.17	5	0	5	***	***	***
	Cartographers and Photogrammetrists	***	***	10.81	0	0	0	44,750	65,087	75,255
17-1022	Surveyors	120	130	6.56	5	0	5	29,396	60,122	75,485
17-2011	Aerospace Engineers	30	30	20.00	0	0	0	64,961	82,367	91,070
17-2031	Biomedical Engineers	***	***	3.57	0	0	0	60,246	83,167	94,628
17-2041	Chemical Engineers	30	30	3.23	0	0	0	62,724	97,244	114,504
17-2051	Civil Engineers	850	1,000	18.46	35	15	20	52,353	81,407	95,934
17-2061	Computer Hardware Engineers	70	90	22.97	5	0	0	63,969	90,601	103,918
17-2071	Electrical Engineers	1,120	1,260	12.02	40	15	25	64,841	90,978	104,046
17-2072	Electronics Engineers, Except Computer	360	380	5.03	10	0	10	72,718	103,633	119,090
17-2081	Environmental Engineers	220	280	24.22	10	5	5	42,414	55,692	62,331
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	60	60	10.53	5	0	0	59,223	82,885	94,718
17-2112	Industrial Engineers	490	540	11.70	20	5	15	53,962	81,010	94,533

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Alabama High-Tech Occupations Region 4 Projections and Wages

			Emplo	vment		erage An	nual Job			
				Percent		Openii		A	Annual Sa	lary (\$)
SOC	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
17-2131	Materials Engineers	40	40	5.41	0	0	0	67,551	100,367	116,776
17-2141	Mechanical Engineers	670	740	10.88	30	5	25	59,828	78,413	87,706
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	70	80	1.35	0	0	0	72,670	98,258	111,052
17-2171	Petroleum Engineers	***	***	20.45	0	0	0	***	***	***
17-2199	Engineers, All Other	390	440	12.31	10	5	5	64,940	97,937	114,435
17-3011	Architectural and Civil Drafters	380	380	2.40	5	0	5	35,801	48,895	55,443
17-3012	Electrical and Electronics Drafters	120	140	14.52	5	0	0	33,689	50,566	59,004
17-3013	Mechanical Drafters	190	190	3.24	5	0	0	30,726	44,511	51,403
17-3019	Drafters, All Other	80	100	18.75	5	0	0	31,806	43,647	49,567
17-3022	Civil Engineering Technicians	130	140	3.82	5	0	5	26,784	39,446	45,777
17-3023	Electrical and Electronics Engineering Technicians	170	180	7.06	5	0	5	52,198	64,033	69,951
	Environmental Engineering Technicians	150	180	21.33	5	5	5	33,149	52,996	62,918
	Industrial Engineering Technicians	90	90	4.71	0	0	0	34,989	44,362	49,048
	Mechanical Engineering Technicians	90	100	12.94	5	0	0	23,736	48,543	60,947
	Engineering Technicians, Except Drafters, All Other	80	80	7.89	5	0	0	49,890	58,568	62,906
	Surveying and Mapping Technicians	350	400	12.22	10	5	5	24,813	43,851	53,369
	Food Scientists and Technologists	20	20	5.56	0	0	0	***	***	***
19-1013	Soil and Plant Scientists	10	10	8.33	0	0	0	***	***	***
19-1022	Microbiologists	***	***	17.14	0	0	0	70,476	102,603	118,668
19-1029	Biological Scientists, All Other	***	***	13.64	5	0	0	43,582	58,275	65,621
19-1032	Foresters	30	30	21.43	0	0	0	47,214	76,744	91,509
	Medical Scientists, Except Epidemiologists	***	***	12.77	5	0	0	***	***	***
	Life Scientists, All Other	70	70	-1.47	0	0	0	***	***	***
	Physicists	20	20	20.00	0	0	0	51,876	149,074	
	Atmospheric and Space Scientists	20	20	0.00	0	0	0	69,192	93,782	106,077
19-2031	Chemists	200	230	14.29	10	5	5	39,076	61,726	73,051
19-2032	Materials Scientists	***	***	10.34	0	0	0	***	***	***
	Environmental Scientists and Specialists, Including Health	190	220	15.71	10	5	5	39,791	68,964	83,551
	Geoscientists, Except Hydrologists and Geographers	50	70	24.53	5	0	0	58,100	94,444	112,616
	Physical Scientists, All Other	10	10		0	0	0	***	***	***
	Agricultural and Food Science Technicians	10	10	20.00	0	0	0	***	***	***
	Biological Technicians	770	850	9.82	30	10	25	24,004	37,261	43,889
	Chemical Technicians	230	280	18.97	10	5	5	28,273	46,134	55,063
19-4041	Geological and Petroleum Technicians	***	***	29.41	0	0	0	47,333	66,732	76,432

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Alabama High-Tech Occupations Region 4 Projections and Wages

			Emplo	yment	Av	erage Anı	nual Job			
				Percent		Openir	ngs		Annual Sa	lary (\$)
SOC	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
19-4051	Nuclear Technicians	***	***	23.08	0	0	0	***	***	***
19-4091	Environmental Science and Protection Technicians, Including Health	160	190	16.25	10	5	5	39,364	52,029	58,362
19-4092	Forensic Science Technicians	10	10	7.69	0	0	0	52,952	94,462	115,217
19-4093	Forest and Conservation Technicians	10	10	10.00	0	0	0	34,670	44,974	50,127
19-4099	Life, Physical, and Social Science Technicians, All Other	60	70	1.55	0	0	0	20,107	35,871	43,753
25-1021	Computer Science Teachers, Postsecondary	110	120	12.15	5	0	0	58,644	100,882	122,000
25-1022	Mathematical Science Teachers, Postsecondary	130	150	10.53	5	0	0	48,696	84,310	102,116
25-1032	Engineering Teachers, Postsecondary	***	***	9.64	0	0	0	***	***	***
25-1042	Biological Science Teachers, Postsecondary	1,020	1,610	57.23	75	60	15	***	***	***
25-1052	Chemistry Teachers, Postsecondary	40	50	13.64	0	0	0	46,650	74,499	88,423
25-1053	Environmental Science Teachers, Postsecondary	***	***	7.14	0	0	0	46,877	83,230	101,406
25-1054	Physics Teachers, Postsecondary	40	40	12.82	0	0	0	52,339	88,520	106,610
41-4011	Sales Reps, Wholesale & Manufacturing, Technical & Scientific Products	380	420	11.97	10	5	5	40,585	89,082	113,331
41-9031	Sales Engineers	80	80	-3.85	0	0	0	57,846	91,565	108,424

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Alabama
High-Tech Occupations
Region 5 Projections and Wages

			Emplo	yment	Ave	erage Ani		_		
				Percent		Openir			nnual Sal	
soc	Occupations	2012	2022	Change (%)	Total		Replacement	Entry		Experience
11-3021	Computer and Information Systems Managers	40	50	17.95	0	0	0	65,015	92,794	106,682
11-9041	Architectural and Engineering Managers	80	90	3.66	0	0	0	82,329	122,156	
11-9121	Natural Sciences Managers	***	***	0.00	0	0	0	***	***	***
15-1121	Computer Systems Analysts	70	80	18.18	0	0	0	50,172	69,633	79,363
15-1131	Computer Programmers	130	130	2.40	5	0	5	45,316	86,394	106,933
15-1132	Software Developers, Applications	20	30	13.64	0	0	0	***	***	***
15-1133	Software Developers, Systems Software	***	***	9.52	0	0	0	63,174	94,431	110,059
15-1134	Web Developers	50	60	14.81	0	0	0	17,691	30,157	36,390
15-1141	Database Administrators	30	30	14.29	0	0	0	33,660	50,014	58,190
15-1142	Network and Computer Systems Administrators	160	170	6.21	5	0	0	41,758	59,784	68,798
15-1143	Computer Network Architects	***	***	-16.67	0	0	0	***	***	***
15-1151	Computer User Support Specialists	240	260	11.86	5	5	5	19,583	38,829	48,451
15-1152	Computer Network Support Specialists	30	30	7.41	0	0	0	43,423	63,096	72,932
15-1199	Computer Occupations, All Other	70	60	-9.86	0	0	0	***	***	***
15-2031	Operations Research Analysts	***	***	15.62	0	0	0	***	***	***
15-2041	Statisticians	20	20	29.41	0	0	0	***	***	***
17-1021	Cartographers and Photogrammetrists	***	***	9.09	0	0	0	***	***	***
17-1022	Surveyors	40	40	2.38	0	0	0	34,711	50,584	58,521
17-2011	Aerospace Engineers	***	***	20.83	0	0	0	***	***	***
17-2041	Chemical Engineers	***	***	-11.11	0	0	0	***	***	***
17-2051	Civil Engineers	180	200	8.33	5	0	5	43,525	64,627	75,177
17-2071	Electrical Engineers	80	80	5.13	0	0	0	66,506	95,318	109,723
17-2072	Electronics Engineers, Except Computer	40	40	5.13	0	0	0	71,416	75,472	77,501
17-2081	Environmental Engineers	40	40	0.00	0	0	0	61,223	85,794	98,079
17-2111	Health and Safety Engineers, Except Mining Safety Engineers & Inspectors	20	20	9.09	0	0	0	65,645	80,212	87,495
17-2112	Industrial Engineers	510	570	11.91	20	5	15	54,138	73,424	83,067
17-2131	Materials Engineers	***	***	0.00	0	0	0	***	***	***
17-2141	Mechanical Engineers	150	160	10.34	5	0	5	50,828	74,971	87,042
	Mining and Geological Engineers, Including Mining Safety Engineers	***	***	11.11	0	0	0	***	***	***
	Engineers, All Other	***	***	2.75	0	0	0	96,628	107,214	•
	Architectural and Civil Drafters	40	40	-2.50	0	0	0	33,562	45,205	51,026
17-3012	Electrical and Electronics Drafters	30	30	14.81	0	0	0	26,402	44,723	53,885
17-3013	Mechanical Drafters	20	20	0.00	0	0	0	35,032	43,251	47,359

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^{***} Data not available due to confidentiality.

Alabama High-Tech Occupations Region 5 Projections and Wages

				yment		erage An	nual Job			(4)
				Percent		Openir			nnual Sal	
SOC	Occupations	2012	2022	Change (%)	Total		Replacement	Entry		Experience
17-3019	Drafters, All Other	***	***	13.33	0	0	0	39,419	52,602	59,194
17-3022	Civil Engineering Technicians	50	50	-2.17	0	0	0	***	***	***
17-3023	Electrical and Electronics Engineering Technicians	60	50	-11.86	0	0	0	69,037	81,836	88,236
17-3025	Environmental Engineering Technicians	***	***	0.00	0	0	0	***	***	***
17-3026	Industrial Engineering Technicians	100	120	12.50	5	0	0	33,406	44,925	50,685
17-3027	Mechanical Engineering Technicians	***	***	28.57	0	0	0	44,139	52,918	57,309
17-3029	Engineering Technicians, Except Drafters, All Other	***	***	1.04	0	0	0	54,085	63,802	68,661
17-3031	Surveying and Mapping Technicians	80	90	6.17	0	0	0	23,927	34,581	39,909
19-1012	Food Scientists and Technologists	10	10	0.00	0	0	0	***	***	***
19-1013	Soil and Plant Scientists	10	10	12.50	0	0	0	***	***	***
19-1023	Zoologists and Wildlife Biologists	***	***	0.00	0	0	0	***	***	***
19-1031	Conservation Scientists	***	***	-12.50	0	0	0	***	***	***
19-1032	Foresters	20	20	5.88	0	0	0	36,178	49,364	55,956
19-2031	Chemists	20	20	5.56	0	0	0	52,075	79,333	92,962
19-2032	Materials Scientists	***	***	0.00	0	0	0	***	***	***
19-2041	Environmental Scientists and Specialists, Including Health	***	***	0.00	0	0	0	***	***	***
19-4011	Agricultural and Food Science Technicians	10	10	0.00	0	0	0	***	***	***
19-4021	Biological Technicians	10	10	0.00	0	0	0	30,264	42,848	49,140
19-4031	Chemical Technicians	30	30	14.29	0	0	0	30,045	43,330	49,973
	Environmental Science and Protection Technicians, Including Health	120	120	0.83	5	0	5	***	***	***
19-4093	Forest and Conservation Technicians	40	40	-7.32	0	0	0	29,937	40,169	45,286
	Life, Physical, and Social Science Technicians, All Other	30	30	-6.90	0	0	0	34,279	44,741	49,971
	Computer Science Teachers, Postsecondary	60	70	11.86	0	0	0	44,363	58,713	65,887
	Mathematical Science Teachers, Postsecondary	30	30	3.70	0	0	0	38,042	58,456	68,662
	Engineering Teachers, Postsecondary	***	***	12.50	0	0	0	***	***	***
	Biological Science Teachers, Postsecondary	40	40	15.79	0	0	0	42,763	59,290	67,554
25-1052	Chemistry Teachers, Postsecondary	***	***	0.00	0	0	0	57,189	84,699	98,454
25-1054	Physics Teachers, Postsecondary	***	***	0.00	0	0	0	64,564	80,122	87,900
41-4011	Sales Reps, Wholesale & Manufacturing, Technical & Scientific Products	60	60	6.78	0	0	0	42,858	77,150	94,296

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Alabama
High-Tech Occupations
Region 6 Projections and Wages

		Keţ	Jion 6	Projections a	and wa	ges				
			Emplo	yment Percent	Ave	erage Anı Openir		A	nnual Sa	lary (\$)
soc	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
11-3021	Computer and Information Systems Managers	20	20	20.00	0	0	0	***	***	***
11-9041	Architectural & Engineering Managers	30	30	0.00	0	0	0	109,044	119,761	125,120
15-1121	Computer Systems Analysts	10	10	33.33	0	0	0	***	***	***
15-1131	Computer Programmers	20	20	0.00	0	0	0	***	***	***
15-1133	Software Developers, Systems Software	10	10	22.22	0	0	0	***	***	***
15-1141	Database Administrators	***	***	20.00	0	0	0	***	***	***
	Network and Computer Systems Administrators	40	40	0.00	0	0	0	31,893	50,590	59,940
	Computer User Support Specialists	60	70	10.00	0	0	0	23,485	29,828	32,999
17-2051	Civil Engineers	40	40	7.69	0	0	0	41,119	59,003	67,946
17-2071	Electrical Engineers	***	***	-10.00	0	0	0	56,579	81,397	93,807
	Electronics Engineers, Except Computer	***	***	0.00	0	0	0	***	***	***
17-2081	Environmental Engineers	***	***	0.00	0	0	0	***	***	***
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	***	***	0.00	0	0	0	***	***	***
17-2112	Industrial Engineers	90	90	2.33	0	0	0	64,349	87,578	99,193
17-2141	Mechanical Engineers	***	***	4.17	0	0	0	***	***	***
17-2199	Engineers, All Other	***	***	0.00	0	0	0	***	***	***
17-3013	Mechanical Drafters	***	***	0.00	0	0	0	***	***	***
17-3023	Electrical and Electronics Engineering Technicians	***	***	0.00	0	0	0	***	***	***
17-3026	Industrial Engineering Technicians	20	20	12.50	0	0	0	30,419	36,616	39,715
19-1012	Food Scientists and Technologists	10	10	0.00	0	0	0	***	***	***
19-1023	Zoologists and Wildlife Biologists	***	***	0.00	0	0	0	***	***	***
19-1029	Biological Scientists, All Other	***	***	-12.50	0	0	0	***	***	***
19-1032	Foresters	20	10	-6.67	0	0	0	***	***	***
19-2041	Environmental Scientists and Specialists, Including Health	***	***	18.18	0	0	0	***	***	***
	Agricultural and Food Science Technicians	10	10	0.00	0	0	0	***	***	***
19-4021	Biological Technicians	***	***	0.00	0	0	0	***	***	***
19-4031	Chemical Technicians	***	***	25.00	0	0	0	***	***	***
19-4091	Environmental Science and Protection Technicians, Including Health	***	***	50.00	0	0	0	***	***	***
19-4093	Forest and Conservation Technicians	10	10	-8.33	0	0	0	34,078	43,153	47,690
41-4011	Sales Reps, Wholesale & Manufacturing, Technical & Scientific Products	10	10	0.00	0	0	0	***	***	***

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Alabama **High-Tech Occupations Region 7 Projections and Wages**

			Emplo	yment	Ave	erage An	nual Job			
			•	Percent		Openii		A	nnual Sala	ry (\$)
SOC	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean E	Experience
11-3021	Computer and Information Systems Managers	370	420	12.47	10	5	5	78,208	106,537	120,702
11-9041	Architectural and Engineering Managers	110	120	3.60	5	0	5	75,396	105,582	120,676
11-9121	Natural Sciences Managers	***	***	0.00	0	0	0	***	***	***
15-1111	Computer and Information Research Scientists	20	20	22.22	0	0	0	***	***	***
15-1121	Computer Systems Analysts	390	480	24.23	15	10	5	48,454	68,083	77,898
15-1122	Information Security Analysts	30	40	30.00	0	0	0	54,287	75,706	86,415
15-1131	Computer Programmers	770	780	1.03	20	0	20	53,982	80,667	94,010
15-1132	Software Developers, Applications	240	290	21.70	10	5	5	65,258	98,965	115,818
15-1133	Software Developers, Systems Software	250	310	23.41	10	5	5	65,328	89,781	102,007
15-1134	Web Developers	70	80	18.46	0	0	0	33,647	60,863	74,471
15-1141	Database Administrators	530	550	5.32	15	5	10	55,465	78,744	90,383
15-1142	Network and Computer Systems Administrators	570	660	17.31	20	10	10	46,550	65,456	74,909
15-1143	Computer Network Architects	60	70	20.69	0	0	0	63,076	87,282	99,384
15-1151	Computer User Support Specialists	700	840	19.46	25	15	10	31,014	46,824	54,729
15-1152	Computer Network Support Specialists	210	270	29.19	10	5	5	24,549	43,234	52,577
15-1199	Computer Occupations, All Other	650	610	-6.75	10	0	10	71,985	86,638	93,965
15-2031	Operations Research Analysts	70	80	27.27	5	0	0	38,891	63,784	76,230
15-2041	Statisticians	100	130	25.74	5	5	5	34,758	48,880	55,942
17-1021	Cartographers and Photogrammetrists	30	30	-5.88	0	0	0	59,445	78,310	87,744
17-1022	Surveyors	80	90	9.76	5	0	0	35,736	49,226	55,971
17-2011	Aerospace Engineers	***	***	25.58	0	0	0	***	***	***
17-2041	Chemical Engineers	***	***	14.81	0	0	0	***	***	***
17-2051	Civil Engineers	840	950	12.59	30	10	20	45,209	68,811	80,613
17-2061	Computer Hardware Engineers	80	80	3.90	0	0	0	***	***	***
17-2071	Electrical Engineers	170	200	18.13	5	5	5	52,366	100,904	125,173
17-2072	Electronics Engineers, Except Computer	50	50	-2.00	0	0	0	***	***	***
17-2081	Environmental Engineers	220	230	5.56	5	0	5	50,719	75,881	88,463
17-2111	Health and Safety Engineers, Except Mining Safety Engineers & Inspectors	20	20	9.09	0	0	0	79,630	95,368	103,237
17-2112	Industrial Engineers	270	300	11.11	10	5	10	59,318	76,125	84,528
17-2131	Materials Engineers	***	***	0.00	0	0	0	***	***	***
17-2141	Mechanical Engineers	220	240	8.60	10	0	10	53,169	76,597	88,311
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	***	***	21.05	0	0	0	***	***	***

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Alabama High-Tech Occupations Region 7 Projections and Wages

			Emplo	yment	Ave	erage An	nual Job			
				Percent		Openir		Α	nnual Sa	lary (\$)
SOC	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
17-2199	Engineers, All Other	280	300	6.79	5	0	5	***	***	***
17-3011	Architectural and Civil Drafters	100	100	-0.99	0	0	0	34,969	52,427	61,157
17-3012	Electrical and Electronics Drafters	20	20	26.32	0	0	0	***	***	***
17-3013	Mechanical Drafters	40	40	-5.13	0	0	0	47,586	82,405	99,814
17-3019	Drafters, All Other	20	30	22.73	0	0	0	***	***	***
17-3021	Aerospace Engineering and Operations Technicians	***	***	-14.29	0	0	0	***	***	***
17-3022	Civil Engineering Technicians	70	70	4.48	0	0	0	25,363	33,764	37,965
17-3023	Electrical and Electronics Engineering Technicians	180	210	12.02	5	0	5	42,741	57,224	64,466
17-3025	Environmental Engineering Technicians	***	***	17.24	0	0	0	38,361	50,527	56,610
17-3026	Industrial Engineering Technicians	60	70	13.33	0	0	0	36,199	55,115	64,573
17-3027	Mechanical Engineering Technicians	80	90	14.67	5	0	0	38,095	50,540	56,764
17-3029	Engineering Technicians, Except Drafters, All Other	***	***	11.11	0	0	0	32,043	41,942	46,892
17-3031	Surveying and Mapping Technicians	90	100	13.48	5	0	0	31,325	45,763	52,982
19-1012	Food Scientists and Technologists	10	10	20.00	0	0	0	***	***	***
19-1013	Soil and Plant Scientists	10	10	0.00	0	0	0	***	***	***
19-1022	Microbiologists	***	***	1.22	0	0	0	***	***	***
19-1023	Zoologists and Wildlife Biologists	***	***	0.00	0	0	0	***	***	***
19-1029	Biological Scientists, All Other	***	***	0.00	0	0	0	***	***	***
19-1031	Conservation Scientists	***	***	0.00	0	0	0	***	***	***
19-1032	Foresters	30	30	7.14	0	0	0	***	***	***
19-1041	Epidemiologists	***	***	3.45	0	0	0	***	***	***
19-1099	Life Scientists, All Other	***	***	0.00	0	0	0	***	***	***
19-2012	Physicists	40	40	13.51	0	0	0	***	***	***
19-2021	Atmospheric and Space Scientists	***	***	0.00	0	0	0	***	***	***
19-2031	Chemists	60	60	1.61	0	0	0	40,401	61,584	72,176
19-2041	Environmental Scientists and Specialists, Including Health	350	360	3.15	10	0	10	39,865	54,747	62,188
19-2042	Geoscientists, Except Hydrologists and Geographers	60	70	15.25	5	0	0	***	***	***
	Hydrologists	***	***	0.00	0	0	0	***	***	***
19-2099	Physical Scientists, All Other	***	***	-3.33	0	0	0	***	***	***
	Agricultural and Food Science Technicians	10	10	0.00	0	0	0	***	***	***
19-4021	Biological Technicians	***	***	7.69	0	0	0	26,502	36,452	41,426
19-4031	Chemical Technicians	40	30	-5.71	0	0	0	22,776	36,510	43,376
19-4091	Environmental Science and Protection Technicians, Including Health	40	50	21.62	5	0	0	31,361	39,811	44,036

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Alabama High-Tech Occupations Region 7 Projections and Wages

			Emplo	yment	Average Annual Job Openings			Annual Calany (A)			
				Percent		•	<u> </u>	Ar	nnual Sa	lary (\$)	
SOC	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience	
19-4092	Forensic Science Technicians	40	50	4.55	0	0	0	30,647	40,377	45,243	
19-4093	Forest and Conservation Technicians	20	30	8.33	0	0	0	32,223	44,121	50,070	
19-4099	Life, Physical, and Social Science Technicians, All Other	60	60	5.45	0	0	0	27,391	36,375	40,867	
25-1021	Computer Science Teachers, Postsecondary	60	70	12.50	0	0	0	49,703	80,479	95,867	
25-1022	Mathematical Science Teachers, Postsecondary	50	60	11.11	0	0	0	50,907	65,749	73,171	
25-1042	Biological Science Teachers, Postsecondary	50	60	18.75	0	0	0	51,550	74,210	85,539	
25-1052	Chemistry Teachers, Postsecondary	***	***	12.50	0	0	0	***	***	***	
41-4011	Sales Reps, Wholesale & Manufacturing, Technical & Scientific Products	70	70	7.25	0	0	0	52,902	77,349	89,574	
41-9031	Sales Engineers	***	***	0.00	0	0	0	***	***	***	

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Alabama
High-Tech Occupations
Region 8 Projections and Wages

		176		Projections a						
			Emplo	yment	Ave	erage Anı Openir		Α.	nnual Sala	rv (\$)
soc	Occupations	2012	2022	Percent Change (%)	Total	•	Replacement	Entry		Experience
11-3021	Computer and Information Systems	70	90	25.71	5	0	0	78,826	106.857	120,872
11-3021	Managers	70	90	25.71	J	U	U	70,020	100,007	120,072
11-9041	Architectural & Engineering Managers	40	50	17.95	0	0	0	89,308	121,606	137,755
11-9121	Natural Sciences Managers	***	***	-10.00	0	0	0	85,263	103,902	113,221
15-1121	Computer Systems Analysts	70	80	21.54	0	0	0	48,618	60,903	67,046
15-1122	Information Security Analysts	***	***	20.00	0	0	0	***	***	***
15-1131	Computer Programmers	100	130	29.13	5	5	5	55,011	79,177	91,260
15-1132	Software Developers, Applications	30	40	37.93	0	0	0	66,790	89,627	101,045
15-1133	Software Developers, Systems Software	20	30	26.09	0	0	0	35,491	51,959	60,193
15-1134	Web Developers	20	20	17.65	0	0	0	44,197	72,927	87,292
15-1141	Database Administrators	30	40	21.88	0	0	0	43,958	70,195	83,314
15-1142	Network and Computer Systems Administrators	120	140	14.75	5	0	0	50,726	68,689	77,670
15-1151	Computer User Support Specialists	500	610	20.24	20	10	10	30,820	51,902	62,442
15-1152	Computer Network Support Specialists	40	50	12.20	0	0	0	34,968	56,344	67,033
15-1199	Computer Occupations, All Other	10	10	0.00	0	0	0	52,972	65,793	72,204
15-2041	Statisticians	10	20	53.85	0	0	0	***	***	***
17-1021	Cartographers and Photogrammetrists	***	***	25.00	0	0	0	***	***	***
17-1022	Surveyors	30	30	0.00	0	0	0	31,092	54,983	66,929
17-2011	Aerospace Engineers	10	10	62.50	0	0	0	***	***	***
17-2041	Chemical Engineers	30	30	3.33	0	0	0	90,434	103,930	110,678
17-2051	Civil Engineers	90	100	11.11	5	0	0	42,683	72,288	87,090
17-2071	Electrical Engineers	50	70	28.85	5	0	0	61,037	80,347	90,003
17-2072	Electronics Engineers, Except Computer	50	50	15.56	0	0	0	59,020	73,030	80,035
17-2081	Environmental Engineers	40	50	30.56	0	0	0	44,677	59,476	66,875
17-2111	Health and Safety Engineers, Except Mining Safety Engineers & Inspectors	20	20	11.76	0	0	0	58,214	77,784	87,568
17-2112	Industrial Engineers	100	110	16.33	5	0	5	57,363	74,523	83,103
17-2131	Materials Engineers	***	***	33.33	0	0	0	52,630	72,238	82,041
17-2141	Mechanical Engineers	100	120	18.45	5	0	5	54,913	74,483	84,268
17-2199	Engineers, All Other	40	50	13.64	0	0	0	51,139	76,352	88,958
17-3011	Architectural and Civil Drafters	30	30	-7.41	0	0	0	32,848	41,302	45,529
17-3013	Mechanical Drafters	20	20	9.52	0	0	0	32,717	42,415	47,264
17-3019	Drafters, All Other	***	***	25.00	0	0	0	22,650	35,617	42,100
17-3021	Aerospace Engineering and Operations Technicians	***	***	42.86	0	0	0	***	***	***
17-3022	Civil Engineering Technicians	40	40	-7.32	0	0	0	28,399	48,697	58,847

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^{***} Data not available due to confidentiality.

Alabama High-Tech Occupations Region 8 Projections and Wages

		1.0;	Emplo	vment		erage Anni	ual Job			
			Linpio	Percent	7.00	Opening		Aı	nnual Sala	ary (\$)
soc	Occupations	2012	2022	Change (%)	Total	Growth F	Replacement	Entry	Mean	Experience
17-3023	Electrical and Electronics Engineering Technicians	30	30	28.00	0	0	0	53,759	65,415	71,242
17-3025	Environmental Engineering Techs	***	***	15.38	0	0	0	***	***	***
17-3026	Industrial Engineering Technicians	10	10	60.00	0	0	0	45,166	63,310	72,383
17-3027	Mechanical Engineering Technicians	30	40	20.00	0	0	0	37,025	48,116	53,660
17-3029	Engineering Technicians, Except Drafters, All Other	10	20	14.29	0	0	0	***	***	***
17-3031	Surveying and Mapping Technicians	30	30	10.71	0	0	0	20,902	29,627	33,990
19-1012	Food Scientists and Technologists	10	10	0.00	0	0	0	***	***	***
19-1013	Soil and Plant Scientists	40	40	2.86	0	0	0	51,882	66,646	74,027
19-1022	Microbiologists	20	20	0.00	0	0	0	37,495	48,663	54,247
19-1023	Zoologists and Wildlife Biologists	***	***	0.00	0	0	0	38,695	61,185	72,429
19-1031	Conservation Scientists	30	30	8.00	0	0	0	52,274	72,499	82,612
19-1032	Foresters	20	20	-10.53	0	0	0	***	***	***
19-1099	Life Scientists, All Other	***	***	0.00	0	0	0	***	***	***
19-2012	Physicists	10	20	23.08	0	0	0	***	***	***
19-2031	Chemists	40	40	5.00	0	0	0	47,418	61,374	68,353
19-2041	Environmental Scientists and Specialists, Including Health	20	20	5.56	0	0	0	38,197	60,963	72,345
	Geoscientists, Except Hydrologists and Geographers	***	***	25.00	0	0	0	***	***	***
	Physical Scientists, All Other	10	10	0.00	0	0	0	***	***	***
19-4011	Agricultural and Food Science Techs	90	100	4.26	5	0	5	30,354	44,615	51,747
19-4021	Biological Technicians	130	140	9.23	5	0	5	31,890	46,931	54,451
19-4031	Chemical Technicians	50	50	1.96	0	0	0	28,214	40,008	45,905
19-4093	Forest and Conservation Technicians	10	20	7.14	0	0	0	26,830	39,869	46,389
19-4099	Life, Physical, and Social Science Technicians, All Other	50	50	6.25	0	0	0	31,375	42,946	48,732
	Computer Science Teachers, Postsecondary	50	50	10.42	0	0	0	63,021	96,071	112,596
	Mathematical Science Teachers, Postsecondary	***	***	10.34	5	0	0	43,882	78,409	95,673
	Engineering Teachers, Postsecondary	280	310	9.68	5	5	5	***	***	***
	Agricultural Sciences Teachers, Postsecondary	***	***	6.40	5	0	5	***	***	***
	Biological Science Teachers, Postsecondary	***	***	15.79	5	0	0	47,995	73,982	86,977
	Forestry and Conservation Science Teachers, Postsecondary	***	***	8.70	0	0	0	***	***	***
	Chemistry Teachers, Postsecondary	70	70	12.31	0	0	0	***	***	***
	Physics Teachers, Postsecondary	50	60	14.00	0	0	0	48,824	76,584	90,463
41-4011	Sales Reps, Wholesale & Manufacturing, Technical & Scientific Products	10	10	-7.14	0	0	0	***	***	***

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Alabama
High-Tech Occupations
Region 9 Projections and Wages

			Emplo	yment	Ave	•	nual Job			
				Percent		Openi			nnual Sala	• • •
SOC	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
11-3021	Computer and Information Systems Managers	260	320	22.31	10	5	5	60,382	98,895	118,151
11-9041	Architectural and Engineering Managers	310	330	8.47	10	5	10	97,205	123,767	137,049
11-9121	Natural Sciences Managers	30	30	0.00	0	0	0	81,357	101,750	111,947
15-1121	Computer Systems Analysts	300	400	31.25	15	10	5	43,043	61,720	71,059
15-1122	Information Security Analysts	20	20	37.50	0	0	0	52,054	69,883	78,797
15-1131	Computer Programmers	490	560	14.69	20	5	15	45,483	65,979	76,227
15-1132	Software Developers, Applications	210	280	29.72	10	5	5	54,987	88,149	104,731
15-1133	Software Developers, Systems Software	170	230	32.37	10	5	0	56,045	80,020	92,007
15-1134	Web Developers	90	100	17.44	5	0	0	32,601	43,141	48,410
15-1141	Database Administrators	290	390	34.71	15	10	5	41,099	68,392	82,037
15-1142	Network and Computer Systems Administrators	610	710	17.30	20	10	10	47,309	66,123	75,529
15-1143	Computer Network Architects	30	40	21.88	0	0	0	56,712	75,801	85,346
15-1151	Computer User Support Specialists	1,230	1,730	40.78	70	50	20	25,766	41,391	49,203
15-1152	Computer Network Support Specialists	210	260	27.54	10	5	5	34,426	51,429	59,931
15-1199	Computer Occupations, All Other	70	80	10.14	0	0	0	***	***	***
15-2031	Operations Research Analysts	***	***	58.70	5	5	0	61,842	77,715	85,652
15-2041	Statisticians	***	***	27.27	0	0	0	***	***	***
17-1021	Cartographers and Photogrammetrists	30	30	3.03	0	0	0	45,282	62,434	71,009
17-1022	Surveyors	120	130	13.79	5	0	0	39,608	59,590	69,583
17-2011	Aerospace Engineers	70	100	37.50	5	5	0	50,136	90,008	109,943
17-2041	Chemical Engineers	180	200	12.43	5	0	5	75,675	102,702	116,215
17-2051	Civil Engineers	670	760	14.05	25	10	15	51,412	78,350	91,819
17-2061	Computer Hardware Engineers	20	20	9.52	0	0	0	90,592	127,396	145,799
17-2071	Electrical Engineers	270	300	8.76	10	0	5	59,563	84,447	96,889
17-2072	Electronics Engineers, Except Computer	140	160	14.08	5	0	5	69,198	93,343	105,416
17-2081	Environmental Engineers	120	140	15.13	5	0	5	58,874	89,878	105,380
17-2111	Health and Safety Engineers, Except Mining Safety Engineers & Inspectors	70	70	12.31	5	0	0	59,326	90,252	105,714
17-2112	Industrial Engineers	540	580	6.25	20	5	15	65,183	89,138	101,115
17-2121	Marine Engineers and Naval Architects	140	160	11.51	5	0	5	52,969	58,958	61,952
17-2131	Materials Engineers	20	20	11.11	0	0	0	59,443	80,936	91,683
17-2141	Mechanical Engineers	300	320	6.40	10	0	10	62,702	87,223	99,482
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers	***	***	36.36	0	0	0	***	***	***

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Alabama High-Tech Occupations Region 9 Projections and Wages

			Emplo	vment		erage Ani	nual Job			
		-	p	Percent		Openir		A	nnual Sal	ary (\$)
soc	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
17-2171	Petroleum Engineers	***	***	44.44	0	0	0	***	***	***
17-2199	Engineers, All Other	220	250	13.89	5	5	5	48,315	77,264	91,740
17-3011	Architectural and Civil Drafters	190	190	0.00	0	0	0	39,625	56,524	64,973
17-3012	Electrical and Electronics Drafters	80	90	17.11	0	0	0	37,783	58,738	69,217
17-3013	Mechanical Drafters	90	100	6.38	0	0	0	47,745	65,870	74,932
17-3019	Drafters, All Other	20	30	20.83	0	0	0	31,747	42,432	47,775
17-3021	Aerospace Engineering and Operations Technicians	20	30	22.73	0	0	0	***	***	***
17-3022	Civil Engineering Technicians	140	150	2.82	5	0	5	30,456	39,670	44,277
17-3023	Electrical and Electronics Engineering Technicians	110	120	5.26	5	0	0	49,719	75,335	88,144
17-3025	Environmental Engineering Technicians	100	110	17.89	5	0	0	45,120	54,753	
	Industrial Engineering Technicians	80	100	18.75	5	0	0	57,538	72,675	80,243
	Mechanical Engineering Technicians	70	80	14.93	0	0	0	32,548	54,483	65,449
17-3029	Engineering Technicians, Except Drafters, All Other	120	120	0.00	0	0	0	36,410	57,481	68,017
17-3031	Surveying and Mapping Technicians	170	200	15.38	5	5	5	27,509	37,030	41,791
19-1012	Food Scientists and Technologists	20	20	0.00	0	0	0	***	***	***
19-1013	Soil and Plant Scientists	10	20	7.14	0	0	0	***	***	***
19-1021	Biochemists and Biophysicists	***	***	16.67	0	0	0	***	***	***
19-1022	Microbiologists	***	***	4.88	0	0	0	***	***	***
19-1023	Zoologists and Wildlife Biologists	30	40	50.00	0	0	0	42,416	61,667	71,293
19-1029	Biological Scientists, All Other	60	50	-7.02	0	0	0	65,142	78,783	85,603
19-1031	Conservation Scientists	10	10	-8.33	0	0	0	40,236	61,024	71,419
19-1032	Foresters	20	20	9.09	0	0	0	40,496	61,120	71,432
19-1042	Medical Scientists, Except Epidemiologists	***	***	14.29	0	0	0	***	***	***
19-1099	Life Scientists, All Other	***	***	0.00	0	0	0	***	***	***
19-2012	Physicists	***	***	0.00	0	0	0	***	***	***
19-2021	Atmospheric and Space Scientists	***	***	-5.88	0	0	0	55,967	70,359	77,555
19-2031	Chemists	140	140	-2.82	5	0	5	63,376	85,691	96,849
19-2032	Materials Scientists	***	***	0.00	0	0	0	***	***	***
19-2041	Environmental Scientists and Specialists, Including Health	200	230	16.42	10	5	5	38,893	54,401	62,155
	Geoscientists, Except Hydrologists and Geographers	40	50	21.43	0	0	0	41,467	65,907	78,127
19-2099	Physical Scientists, All Other	20	20	0.00	0	0	0	***	***	***
19-4011	Agricultural and Food Science Technicians	***	***	0.00	0	0	0	***	***	***
19-4021	Biological Technicians	30	40	26.47	0	0	0	27,401	37,300	42,250

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Alabama High-Tech Occupations Region 9 Projections and Wages

			Emplo	yment	Ave	erage Anı				
				Percent		Openir			nnual Sa	
SOC	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
19-4031	Chemical Technicians	170	180	6.98	5	0	5	41,425	57,042	64,850
19-4041	Geological and Petroleum Technicians	***	***	16.67	0	0	0	***	***	***
19-4091	Environmental Science and Protection Technicians, Including Health	150	190	28.19	10	5	5	30,030	40,459	45,674
19-4092	Forensic Science Technicians	***	***	0.00	0	0	0	***	***	***
19-4093	Forest and Conservation Technicians	***	***	0.00	0	0	0	34,811	43,214	47,416
19-4099	Life, Physical, and Social Science Technicians, All Other	40	40	2.56	0	0	0	***	***	***
25-1021	Computer Science Teachers, Postsecondary	30	40	14.71	0	0	0	49,935	71,004	81,539
25-1022	Mathematical Science Teachers, Postsecondary	60	70	12.50	0	0	0	42,646	63,932	74,574
25-1032	Engineering Teachers, Postsecondary	***	***	14.29	0	0	0	***	***	***
25-1041	Agricultural Sciences Teachers, Postsecondary	***	***	0.00	0	0	0	***	***	***
25-1042	Biological Science Teachers, Postsecondary	240	290	19.83	10	5	5	41,284	81,545	101,677
25-1051	Atmospheric, Earth, Marine, & Space Sciences Teachers, Postsecondary	***	***	16.67	0	0	0	***	***	***
25-1052	Chemistry Teachers, Postsecondary	30	30	12.00	0	0	0	44,823	67,063	78,183
25-1054	Physics Teachers, Postsecondary	***	***	18.18	0	0	0	52,402	68,423	76,434
41-4011	Sales Reps, Wholesale & Manufacturing, Technical & Scientific Products	70	80	15.07	0	0	0	55,123	85,576	100,802
41-9031	Sales Engineers	10	20	33.33	0	0	0	71,615	132,821	163,425

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Alabama
High-Tech Occupations
Region 10 Projections and Wages

			Emplo	yment	Ave	erage An				
				Percent		Openir			nnual Sal	
SOC	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
11-3021	Computer and Information Systems Managers	90	100	14.29	0	0	0	66,825	93,514	106,860
	Architectural and Engineering Managers	190	210	8.38	5	0	5	91,696	126,228	
15-1121	Computer Systems Analysts	90	110	22.47	5	0	0	54,015	74,416	84,616
15-1122	Information Security Analysts	20	30	30.43	0	0	0	41,991	60,787	70,185
15-1131	Computer Programmers	180	190	9.66	5	0	5	51,739	72,182	82,403
15-1132	Software Developers, Applications	170	210	23.84	5	5	0	61,155	77,914	86,293
15-1133	Software Developers, Systems Software	100	130	23.76	5	0	0	63,850	91,934	105,975
15-1134	Web Developers	40	40	13.16	0	0	0	35,082	47,378	53,526
15-1141	Database Administrators	40	40	25.71	0	0	0	43,376	67,660	79,802
15-1142	Network and Computer Systems Administrators	160	190	14.72	5	0	5	46,673	65,734	75,264
15-1143	Computer Network Architects	50	40	-6.38	0	0	0	69,581	96,035	109,261
15-1151	Computer User Support Specialists	260	310	18.68	10	5	5	23,949	38,926	46,413
15-1152	Computer Network Support Specialists	30	30	0.00	0	0	0	42,470	56,509	63,530
15-1199	Computer Occupations, All Other	120	120	-2.54	0	0	0	64,722	79,638	87,095
15-2031	Operations Research Analysts	***	***	12.00	0	0	0	65,108	91,842	105,209
15-2041	Statisticians	***	***	0.00	0	0	0	***	***	***
17-1021	Cartographers and Photogrammetrists	***	***	0.00	0	0	0	***	***	***
17-1022	Surveyors	30	30	11.54	0	0	0	23,148	45,892	57,264
17-2011	Aerospace Engineers	70	80	11.76	5	0	0	59,213	88,925	103,782
17-2051	Civil Engineers	210	250	17.22	10	5	5	43,152	66,931	78,821
17-2061	Computer Hardware Engineers	***	***	23.53	0	0	0	***	***	***
17-2071	Electrical Engineers	410	430	5.35	10	0	10	63,139	89,565	102,778
17-2072	Electronics Engineers, Except Computer	20	20	9.52	0	0	0	61,014	89,543	103,809
17-2081	Environmental Engineers	30	30	3.57	0	0	0	46,595	75,243	89,567
17-2111	Health and Safety Engineers, Except Mining Safety Engineers & Inspectors	20	20	4.55	0	0	0	70,005	81,840	87,757
17-2112	Industrial Engineers	120	130	4.84	5	0	5	60,536	89,311	103,699
17-2131	Materials Engineers	10	20	7.14	0	0	0	***	***	***
17-2141	Mechanical Engineers	230	240	3.48	10	0	10	55,947	81,763	94,671
17-2161	Nuclear Engineers	***	***	2.88	5	0	5	***	***	***
17-2199	Engineers, All Other	250	250	1.22	5	0	5	74,890	102,945	116,972
17-3011	Architectural and Civil Drafters	130	120	-4.76	0	0	0	34,666	46,097	51,812
17-3012	Electrical and Electronics Drafters	***	***	14.29	0	0	0	39,588	51,893	58,045
17-3013	Mechanical Drafters	30	30	0.00	0	0	0	33,820	57,939	69,998

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Alabama High-Tech Occupations Region 10 Projections and Wages

				yment		erage Ani	nual Job			
				Percent	,	Openir		А	nnual Sa	lary (\$)
SOC	Occupations	2012	2022	Change (%)	Total	Growth	Replacement	Entry	Mean	Experience
17-3019	Drafters, All Other	30	40	16.67	0	0	0	35,689	43,900	48,005
17-3022	Civil Engineering Technicians	40	40	0.00	0	0	0	26,707	33,991	37,634
	Electrical and Electronics Engineering Technicians	270	270	0.74	5	0	5	40,324	62,081	72,960
	Environmental Engineering Technicians	***	***	20.00	0	0	0	***	***	***
	Industrial Engineering Technicians	30	30	0.00	0	0	0	36,939	57,495	
17-3027	Mechanical Engineering Technicians	***	***	20.00	0	0	0	42,325	63,602	74,241
	Engineering Technicians, Except Drafters, All Other	20	20	0.00	0	0	0	33,960	59,134	
	Surveying and Mapping Technicians	60	70	15.62	0	0	0	30,459	48,437	
19-1012	Food Scientists and Technologists	30	30	3.85	0	0	0	***	***	***
19-1013	Soil and Plant Scientists	10	10	0.00	0	0	0	***	***	***
19-1023	Zoologists and Wildlife Biologists	***	***	0.00	0	0	0	***	***	***
19-1029	Biological Scientists, All Other	***	***	-16.67	0	0	0	***	***	***
19-1031	Conservation Scientists	10	10	-7.14	0	0	0	58,937	75,304	83,486
19-1032	Foresters	20	20	0.00	0	0	0	36,507	51,194	58,538
19-1042	Medical Scientists, Except Epidemiologists	***	***	28.57	0	0	0	***	***	***
19-2012	Physicists	***	***	25.00	0	0	0	***	***	***
19-2031	Chemists	30	30	4.00	0	0	0	***	***	***
	Environmental Scientists and Specialists, Including Health	50	50	6.38	0	0	0	30,738	58,415	
	Geoscientists, Except Hydrologists and Geographers	***	***	12.50	0	0	0	***	***	***
	Physical Scientists, All Other	10	10	16.67	0	0	0	***	***	***
	Agricultural and Food Science Technicians	10	10	-7.14	0	0	0	***	***	***
	Chemical Technicians	***	***	-6.82	0	0	0	***	***	***
	Environmental Science and Protection Technicians, Including Health	40	40	11.11	0	0	0	31,589	49,660	
	Forest and Conservation Technicians	30	30	0.00	0	0	0	35,570	45,028	
	Life, Physical, and Social Science Technicians, All Other	20	20	-5.26	0	0	0	28,558	45,352	
	Computer Science Teachers, Postsecondary	30	30	7.69	0	0	0	22,920	39,353	
	Mathematical Science Teachers, Postsecondary	60	60	10.91	0	0	0	29,751	52,663	
	Biological Science Teachers, Postsecondary	30	40	16.13	0	0	0	38,810	56,492	·
	Chemistry Teachers, Postsecondary	10	10	11.11	0	0	0	55,735	66,891	
41-4011	Sales Reps, Wholesale & Manufacturing, Technical & Scientific Products	50	50	3.92	0	0	0	***	***	***
41-9031	Sales Engineers	***	***	26.67	0	0	0	***	***	***

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^{***} Data not available due to confidentiality.

Methodology for High-Tech Taxonomy

The Workforce Information Council's High-Tech study committee set about creating a national High-Tech industry taxonomy. The primary goal of this committee was to create a unified High-Tech taxonomy that would allow comparisons at the national and state level. The first step was to decide what occupations were going to be the foundation for the definition. The committee chose the Life and Physical Science, Engineering, Mathematics, and Information Technology Occupations STEM (Science, Technology, Engineering, and Mathematics) subdomain. The next step was to calculate the occupation concentrations by industry in the subdomains. After reviewing the national average concentrations of STEM jobs across all industry sectors, concentration levels of five times (Core concentration) and 2.5 times (Peripheral concentration) the national average were identified as producing a robust, scientific-backed list of high-tech industries. The national High-Tech industry taxonomy is based on four-digit North American Industry Classification System (NAICS) codes. This level was chosen because there is a higher probability that the employment data would be publishable. There are 11 Core concentration industries and 21 Peripheral concentration Industries.

For this report LED Quarterly Workforce Indicators data were used. The reason they were used is because data is fuzzed for industries with smaller employment or for industries where there are a small number of employers can be published. Another reason to use the QWI indicators is that it is also broken down into male and female workers as well as by age group.