



Question 1

Has your firm/organization hired any new employees in the last 12 months?

	Percent Hired	Approximate Number of Firms Hired	Number of Firms in Industry
Agriculture	52%	2,730	5,220
Construction	48%	6,370	13,300
High-Tech	57%	2,120	3,690
Manufacturing	51%	2,640	5,140
Services	65%	46,320	71,820
Trade	67%	31,040	46,680
Other	59%	17,680	29,960

Question 2

In the last 12 months, did your firm/organization have any difficulty finding qualified applicants for any jobs you were trying to fill?

Industry	Employers with Difficulty (Among Those Attempting)		All Employers	
	N	Percent	N	Percent
Agriculture	740	27%	5,220	17%
Construction	850	13%	13,300	9%
High-Tech	500	24%	3,690	17%
Manufacturing	770	29%	5,140	16%
Services	12,780	28%	71,820	19%
Trade	5,990	19%	46,680	13%
Other*	6,470	37%	29,960	24%
Statewide	28,100	26%	175,810	17%

*Other includes Financial, Insurance, Real Estate, Transportation, Warehouse, Utilities, and Government. For category definitions see the last page of this report.

Question 3

How did your firm respond to the difficulty finding qualified applicants? Among firms that had difficulty finding qualified applicants.

Agriculture	Yes	No	N/A	Don't Know	Refused
Did not fill the job opening	30.5%	69.5%			
Hired a less qualified applicant	63.8%	36.3%			
Outsourced work or purchased services from another firm	20.5%	79.5%			
Increased overtime hours for current workers	34.2%	65.8%			
Increased recruiting efforts	54.4%	44.7%		.9%	
Increased wages to attract more applicants	24.3%	74.8%		.9%	

Construction	Yes	No	N/A	Don't Know	Refused
Did not fill the job opening	42.3%	57.0%	.7%		
Hired a less qualified applicant	55.4%	44.6%			
Outsourced work or purchased services from another firm	27.2%	72.8%			
Increased overtime hours for current workers	45.2%	54.8%			
Increased recruiting efforts	44.5%	54.3%		1.2%	
Increased wages to attract more applicants	15.4%	83.7%		.9%	

High Tech	Yes	No	N/A	Don't Know	Refused
Did not fill the job opening	37.7%	62.2%	.2%		
Hired a less qualified applicant	28.0%	60.9%	10.7%	.3%	
Outsourced work or purchased services from another firm	26.7%	73.3%			
Increased overtime hours for current workers	40.7%	59.2%	.2%		
Increased recruiting efforts	69.5%	30.5%			
Increased wages to attract more applicants	6.6%	93.0%	.3%		

Manufacturing	Yes	No	N/A	Don't Know	Refused
Did not fill the job opening	29.0%	71.0%			
Hired a less qualified applicant	35.4%	64.6%			
Outsourced work or purchased services from another firm	29.7%	70.3%			
Increased overtime hours for current workers	37.4%	62.6%			
Increased recruiting efforts	77.0%	23.0%			
Increased wages to attract more applicants	17.9%	82.1%			

Services	Yes	No	N/A	Don't Know	Refused
Did not fill the job opening	50.5%	49.4%	.0%		
Hired a less qualified applicant	56.0%	43.9%		.1%	
Outsourced work or purchased services from another firm	35.2%	64.3%	.0%		.5%
Increased overtime hours for current workers	54.4%	45.1%			.5%
Increased recruiting efforts	62.7%	36.5%		.3%	.5%
Increased wages to attract more applicants	18.4%	81.0%	.0%	.0%	.5%

Trade	Yes	No	N/A	Don't Know	Refused
Did not fill the job opening	25.0%	73.6%	1.0%	.4%	
Hired a less qualified applicant	50.8%	49.0%			.2%
Outsourced work or purchased services from another firm	6.0%	94.0%			
Increased overtime hours for current workers	42.9%	57.1%			
Increased recruiting efforts	70.2%	29.8%			
Increased wages to attract more applicants	22.8%	76.3%		.9%	

Other	Yes	No	N/A	Don't Know	Refused
Did not fill the job opening	38.5%	61.5%			
Hired a less qualified applicant	39.4%	55.6%	4.4%	.6%	
Outsourced work or purchased services from another firm	8.9%	91.1%			
Increased overtime hours for current workers	44.8%	54.1%	.8%	.0%	.2%
Increased recruiting efforts	80.4%	19.6%			
Increased wages to attract more applicants	35.2%	63.3%		1.6%	

Question 5

How much difficulty has your firm/organization experienced in the last 12 months finding qualified applicants with the following education levels? Among firms with difficulty finding qualified applicants.

Agriculture	Much Difficulty	Some Difficulty	No Difficulty	N/A	Don't Know
Neither a high school diploma or GED	3.2%	9.1%	46.4%	41.4%	
High school diploma or GED	5.5%	11.1%	56.0%	26.8%	1%
Some college course work	6.4%	15.6%	36.7%	41.3%	
Vocational certificate	17.7%	20.5%	17.0%	44.8%	
Vocational associate degree	18.2%	11.4%	16.1%	54.4%	
Academic associate degree (A.A. or A.S.)	7.4%	7.4%	12.7%	72.5%	
Bachelor's degree (B.A. or B.S.)	4.3%	10.1%	8.4%	77.2%	
Master's degree (M.A. or M.S.)	5.8%	5.0%	5.7%	83.5%	
Doctoral or Professional degree	5.8%	3.2%	5.7%	85.4%	

Construction	Much Difficulty	Some Difficulty	No Difficulty	N/A	Don't Know
Neither a high school diploma or GED	6.8%	7.8%	44.0%	41.3%	
High school diploma or GED	7.1%	12.0%	47.8%	33.1%	
Some college course work	7.2%	9.5%	19.4%	63.9%	
Vocational certificate	15.1%	20.9%	26.1%	38.0%	
Vocational associate degree	11.8%	6.8%	22.7%	57.7%	1%
Academic associate degree (A.A. or A.S.)	6.5%	1.7%	21.4%	70.4%	
Bachelor's degree (B.A. or B.S.)	6.4%	.4%	26.6%	66.6%	
Master's degree (M.A. or M.S.)		.4%	15.7%	83.9%	
Doctoral or Professional degree			13.7%	86.3%	

High-Tech	Much Difficulty	Some Difficulty	No Difficulty	N/A	Don't Know
Neither a high school diploma or GED	3.2%	10.1%	36.5%	50.2%	
High school diploma or GED	1.1%	11.7%	59.3%	27.9%	
Some college course work	3.7%	10.4%	50.6%	35.3%	
Vocational certificate	4.2%	28.8%	36.8%	29.8%	0%
Vocational associate degree	3.1%	21.6%	40.7%	34.4%	0%
Academic associate degree (A.A. or A.S.)	15.1%	16.5%	31.8%	30.6%	6%
Bachelor's degree (B.A. or B.S.)	20.9%	11.7%	24.8%	42.5%	
Master's degree (M.A. or M.S.)	3.1%	15.7%	11.8%	69.4%	
Doctoral or Professional degree	1.5%	3.6%	20.3%	74.7%	

Manufacturing	Much Difficulty	Some Difficulty	No Difficulty	N/A	Don't Know
Neither a high school diploma or GED	1.6%	8.8%	44.4%	44.0%	1%
High school diploma or GED	5.3%	22.9%	42.0%	29.8%	
Some college course work	3.8%	35.3%	20.0%	40.9%	
Vocational certificate	8.7%	17.5%	19.9%	53.9%	
Vocational associate degree	7.5%	26.7%	15.1%	50.7%	
Academic associate degree (A.A. or A.S.)	6.7%	25.7%	14.7%	52.3%	0%
Bachelor's degree (B.A. or B.S.)	23.7%	14.4%	9.2%	52.8%	
Master's degree (M.A. or M.S.)	10.3%	6.4%	7.8%	75.5%	
Doctoral or Professional degree	4.9%	1.0%	6.9%	87.3%	

Services	Much Difficulty	Some Difficulty	No Difficulty	N/A	Don't Know
Neither a high school diploma or GED	3.9%	9.6%	31.6%	54.7%	0%
High school diploma or GED	6.3%	32.9%	44.4%	16.4%	0%
Some college course work	9.4%	35.0%	24.8%	30.8%	
Vocational certificate	10.4%	40.1%	21.5%	28.0%	
Vocational associate degree	7.6%	28.2%	17.2%	47.0%	
Academic associate degree (A.A. or A.S.)	7.9%	24.6%	12.6%	54.8%	
Bachelor's degree (B.A. or B.S.)	5.4%	8.9%	21.0%	64.7%	
Master's degree (M.A. or M.S.)	5.0%	15.9%	4.7%	74.4%	
Doctoral or Professional degree	4.6%	.8%	5.8%	88.3%	0%

Trade	Much Difficulty	Some Difficulty	No Difficulty	N/A	Don't Know
Neither a high school diploma or GED	.4%	8.1%	58.1%	33.4%	
High school diploma or GED	.9%	12.9%	72.8%	13.4%	
Some college course work	4.4%	18.1%	37.8%	39.6%	
Vocational certificate	7.2%	13.9%	18.4%	60.4%	0%
Vocational associate degree	6.4%	10.6%	16.2%	66.7%	0%
Academic associate degree (A.A. or A.S.)	7.5%	12.1%	14.3%	66.2%	
Bachelor's degree (B.A. or B.S.)	6.1%	11.8%	11.0%	71.2%	
Master's degree (M.A. or M.S.)	6.8%	2.3%	9.1%	81.7%	
Doctoral or Professional degree	6.0%	.4%	10.0%	83.5%	

Other	Much Difficulty	Some Difficulty	No Difficulty	N/A	Don't Know
Neither a high school diploma or GED	3.7%	3.8%	43.6%	48.8%	0%
High school diploma or GED	6.8%	2.3%	54.2%	36.8%	
Some college course work	9.4%	29.9%	24.0%	36.6%	
Vocational certificate	9.7%	32.5%	10.0%	47.8%	
Vocational associate degree	9.4%	6.5%	8.4%	75.6%	0%
Academic associate degree (A.A. or A.S.)	10.9%	5.6%	12.0%	71.5%	
Bachelor's degree (B.A. or B.S.)	12.9%	29.8%	9.7%	47.7%	
Master's degree (M.A. or M.S.)	15.8%	23.6%	8.4%	52.1%	0%
Doctoral or Professional degree	14.8%	.8%	4.8%	79.6%	

Question 6

How much difficulty has your firm/organization had finding employees with the following skills?

Among All Firms

Agriculture	Much Difficulty		Some Difficulty		No Difficulty		N/A		Not Reporting	
	%	Count	%	Count	%	Count	%	Count	%	Count
q6a	1.5%	80	2.9%	150	7.5%	390	2.3%	120	86%	4,480
q6b	2.1%	110	2.9%	150	6.7%	350	2.7%	140	86%	4,480
q6c	2.5%	130	2.9%	150	4.2%	220	4.6%	240	86%	4,480
q6d	2.7%	140	1.9%	100	6.1%	320	3.4%	180	86%	4,480
q6e	3.8%	200	7.3%	380	1.7%	90	1.5%	80	86%	4,480
q6f	1.0%	50	4.2%	220	3.1%	160	5.9%	310	86%	4,480
q6g	3.4%	180	4.4%	230	5.0%	260	1.5%	80	86%	4,480
q6h	4.6%	240	4.6%	240	2.7%	140	2.3%	120	86%	4,480
q6i	3.3%	170	5.6%	290	4.4%	230	.8%	40	86%	4,480
q6j	4.8%	250	6.5%	340	2.7%	140	.4%	20	86%	4,480
q6k	1.5%	80	7.5%	390	3.8%	200	1.3%	70	86%	4,480
q6l	1.5%	80	7.5%	390	4.0%	210	1.1%	60	86%	4,480

Construction	Much Difficulty		Some Difficulty		No Difficulty		N/A		Not Reporting	
	%	Count	%	Count	%	Count	%	Count	%	Count
q6a	.3%	40	1.7%	230	3.9%	520	.5%	60	94%	12,450
q6b	.2%	20	2.0%	270	3.5%	470	.8%	100	94%	12,450
q6c	1.1%	140	2.6%	340	2.6%	340	.3%	40	94%	12,450
q6d	.2%	30	1.4%	180	1.8%	240	2.8%	370	94%	12,450
q6e	2.8%	370	2.5%	330	.4%	50	.8%	100	94%	12,450
q6f	.3%	40	.8%	100	1.4%	180	4.0%	530	94%	12,450
q6g	1.3%	170	3.5%	460	1.4%	190	.2%	30	94%	12,450
q6h	2.7%	360	2.8%	370	.8%	110	.1%	10	94%	12,450
q6i	.5%	60	5.0%	660	.8%	110	.2%	20	94%	12,450
q6j	2.0%	260	2.0%	260	2.0%	270	.3%	40	94%	12,450
q6k	.5%	70	2.9%	390	2.9%	390	.0%	-	94%	12,450
q6l	.5%	60	4.0%	530	1.6%	210	.5%	60	94%	12,450

High Tech	Much Difficulty		Some Difficulty		No Difficulty		N/A		Not Reporting	
q6a	.3%	10	1.9%	70	9.2%	340	2.2%	80	86%	3,190
q6b	.5%	20	3.8%	140	7.0%	260	2.2%	80	86%	3,190
q6c	.8%	30	3.5%	130	6.8%	250	2.7%	100	86%	3,190
q6d	.5%	20	3.3%	120	4.6%	170	5.1%	190	86%	3,190
q6e	4.3%	160	6.8%	250	1.9%	70	.3%	10	86%	3,190
q6f	1.6%	60	5.7%	210	3.8%	140	2.4%	90	86%	3,190
q6g	.8%	30	5.1%	190	6.8%	250	.8%	30	86%	3,190
q6h	3.0%	110	5.7%	210	4.6%	170	.3%	10	86%	3,190
q6i	1.1%	40	8.4%	310	4.1%	150	.0%	-	86%	3,190
q6j	1.4%	50	7.6%	280	4.3%	160	.3%	10	86%	3,190
q6k	.8%	30	7.0%	260	5.1%	190	.3%	10	86%	3,190
q6l	.5%	20	8.4%	310	4.3%	160	.3%	10	86%	3,190

Manufacturing	Much Difficulty		Some Difficulty		No Difficulty		N/A		Not Reporting	
q6a	.8%	40	2.7%	140	10.3%	530	1.2%	60	85%	4,370
q6b	1.0%	50	3.7%	190	8.2%	420	1.9%	100	85%	4,370
q6c	1.8%	90	3.3%	170	8.2%	420	1.8%	90	85%	4,370
q6d	.4%	20	3.7%	190	5.4%	280	5.4%	280	85%	4,370
q6e	8.0%	410	4.9%	250	1.6%	80	.6%	30	85%	4,370
q6f	.4%	20	4.1%	210	6.0%	310	4.3%	220	85%	4,370
q6g	1.0%	50	4.9%	250	7.4%	380	1.6%	80	85%	4,370
q6h	2.9%	150	5.8%	300	4.5%	230	1.8%	90	85%	4,370
q6i	1.9%	100	6.4%	330	6.0%	310	.6%	30	85%	4,370
q6j	3.3%	170	4.9%	250	6.4%	330	.4%	20	85%	4,370
q6k	1.4%	70	4.7%	240	8.4%	430	.6%	30	85%	4,370
q6l	3.1%	160	5.6%	290	5.3%	270	1.0%	50	85%	4,370

Services	Much Difficulty		Some Difficulty		No Difficulty		N/A		Not Reporting	
q6a	.0%	20	4.3%	3,110	11.2%	8,070	2.2%	1,580	82%	59,040
q6b	.1%	80	7.7%	5,520	7.8%	5,600	2.2%	1,570	82%	59,040
q6c	.4%	280	7.3%	5,270	5.3%	3,810	4.7%	3,380	82%	59,040
q6d	4.6%	3,280	2.9%	2,090	4.8%	3,440	5.3%	3,840	82%	59,040
q6e	3.0%	2,130	13.0%	9,350	1.2%	870	.5%	390	82%	59,040
q6f	.6%	440	7.6%	5,430	3.1%	2,210	6.5%	4,700	82%	59,040
q6g	.6%	410	10.2%	7,320	4.5%	3,220	2.5%	1,810	82%	59,040
q6h	3.8%	2,700	8.7%	6,260	2.8%	1,990	2.5%	1,830	82%	59,040
q6i	3.1%	2,260	10.2%	7,360	2.3%	1,630	2.1%	1,530	82%	59,040
q6j	2.0%	1,460	11.4%	8,220	3.7%	2,650	.6%	450	82%	59,040
q6k	.6%	420	12.2%	8,750	3.9%	2,790	1.1%	810	82%	59,040
q6l	.8%	580	11.7%	8,430	4.7%	3,390	.5%	380	82%	59,040

Trade	Much Difficulty		Some Difficulty		No Difficulty		N/A		Not Reporting	
q6a	.5%	250	1.7%	810	10.1%	4,700	.5%	230	87%	40,690
q6b	.6%	270	3.1%	1,470	8.7%	4,050	.4%	200	87%	40,690
q6c	.7%	340	3.5%	1,650	6.7%	3,130	1.0%	480	87%	40,690
q6d	1.2%	540	2.4%	1,140	5.7%	2,640	3.5%	1,650	87%	40,690
q6e	2.9%	1,350	5.9%	2,770	3.0%	1,400	1.0%	460	87%	40,690
q6f	.6%	270	5.9%	2,760	4.6%	2,130	1.8%	830	87%	40,690
q6g	1.6%	740	7.1%	3,320	3.6%	1,700	.2%	110	87%	40,690
q6h	2.8%	1,330	6.3%	2,920	3.7%	1,710	.1%	40	87%	40,690
q6i	1.1%	510	8.0%	3,750	3.5%	1,650	.2%	80	87%	40,690
q6j	3.2%	1,500	7.4%	3,470	1.7%	790	.2%	110	87%	40,690
q6k	.4%	180	8.1%	3,760	4.2%	1,940	.3%	120	87%	40,690
q6l	1.0%	450	8.8%	4,100	3.0%	1,410	.1%	30	87%	40,690

Other	Much Difficulty		Some Difficulty		No Difficulty		N/A		Not Reporting	
q6a	.7%	220	1.6%	490	18.9%	5,670	.3%	90	78%	23,490
q6b	2.2%	650	4.3%	1,290	15.1%	4,510	.0%	-	78%	23,490
q6c	2.3%	700	2.6%	770	15.6%	4,660	1.1%	340	78%	23,490
q6d	1.6%	480	6.1%	1,830	5.4%	1,630	8.4%	2,520	78%	23,490
q6e	4.7%	1,410	15.3%	4,590	1.2%	370	.3%	100	78%	23,490
q6f	1.9%	570	4.4%	1,330	4.8%	1,440	10.4%	3,130	78%	23,490
q6g	2.1%	620	10.6%	3,180	3.8%	1,130	5.1%	1,530	78%	23,490
q6h	3.3%	990	11.0%	3,290	1.4%	410	5.9%	1,780	78%	23,490
q6i	1.5%	450	16.3%	4,890	3.7%	1,120	.0%	-	78%	23,490
q6j	3.1%	920	6.1%	1,840	7.4%	2,230	4.9%	1,470	78%	23,490
q6k	2.9%	880	2.5%	760	11.1%	3,340	4.9%	1,470	78%	23,490
q6l	3.1%	930	15.6%	4,670	2.7%	820	.0%	10	78%	23,490

Question 7

Which of the following has resulted from your firm's difficulty finding qualified applicants?

Agriculture	Yes		No		N/A		Don't Know		Not Reporting	
Lowered overall productivity	4.7%	250	9.1%	480	0.0%	-	0.3%	20	86%	4,480
Reduced product or service quality	4.9%	260	8.9%	470	0.3%	20	0.0%	0	86%	4,480
Reduced production output or sales	8.4%	440	5.7%	300	0.1%	-	0.0%	0	86%	4,480
Prevented firm from expanding its facilities	5.0%	260	8.5%	440	0.4%	20	0.3%	20	86%	4,480
Prevented firm from developing new products/services	2.4%	130	10.4%	550	0.9%	50	0.4%	20	86%	4,480
Caused firm to move some operations out of Washington	0.4%	20	13.1%	680	0.4%	20	0.3%	20	86%	4,480

Construction	Yes		No		N/A		Don't Know		Not Reporting	
Lowered overall productivity	4.8%	640	1.5%	200	0.0%	-	0.0%	0	94%	12,450
Reduced product or service quality	2.3%	310	4.1%	540	0.0%	-	0.0%	0	94%	12,450
Reduced production output or sales	4.4%	580	1.9%	250	0.1%	10	0.0%	0	94%	12,450
Prevented firm from expanding its facilities	2.6%	340	3.8%	510	0.0%	-	0.0%	0	94%	12,450
Prevented firm from developing new products/services	1.3%	170	4.7%	620	0.4%	60	0.0%	0	94%	12,450
Caused firm to move some operations out of Washington	0.4%	50	5.6%	750	0.4%	50	0.0%	0	94%	12,450

High-Tech	Yes		No		N/A		Don't Know		Not Reporting	
Lowered overall productivity	4.5%	170	6.8%	250	1.4%	50	0.8%	30	86%	3,190
Reduced product or service quality	3.0%	110	8.4%	310	1.4%	50	0.8%	30	86%	3,190
Reduced production output or sales	6.0%	220	5.3%	200	1.4%	50	0.8%	30	86%	3,190
Prevented firm from expanding its facilities	3.9%	150	8.7%	320	0.0%	-	0.9%	30	86%	3,190
Prevented firm from developing new products/services	4.0%	150	8.4%	310	0.4%	10	0.8%	30	86%	3,190
Caused firm to move some operations out of Washington	1.2%	40	11.4%	420	0.1%	-	0.8%	30	86%	3,190

Manufacturing	Yes		No		N/A		Don't Know		Not Reporting	
Lowered overall productivity	6.2%	320	8.8%	450	0.0%	-	0.0%	0	85%	4,370
Reduced product or service quality	6.1%	310	8.8%	450	0.1%	-	0.0%	0	85%	4,370
Reduced production output or sales	9.2%	470	5.7%	290	0.1%	10	0.0%	0	85%	4,370
Prevented firm from expanding its facilities	3.9%	200	10.8%	550	0.1%	-	0.2%	10	85%	4,370
Prevented firm from developing new products/services	4.2%	210	10.4%	530	0.3%	10	0.2%	10	85%	4,370
Caused firm to move some operations out of Washington	1.0%	50	13.8%	710	0.0%	-	0.2%	10	85%	4,370

Services	Yes		No		N/A		Don't Know		Not Reporting	
Lowered overall productivity	7.6%	5,460	9.9%	7,100	0.1%	80	0.2%	140	82%	59,040
Reduced product or service quality	6.5%	4,660	11.2%	8,050	0.1%	70	0.0%	0	82%	59,040
Reduced production output or sales	4.8%	3,470	11.9%	8,550	0.6%	440	0.4%	320	82%	59,040
Prevented firm from expanding its facilities	6.0%	4,280	11.2%	8,040	0.5%	380	0.1%	80	82%	59,040
Prevented firm from developing new products/services	4.3%	3,090	12.2%	8,740	1.1%	810	0.2%	120	82%	59,040
Caused firm to move some operations out of Washington	0.7%	500	16.0%	11,480	1.0%	700	0.1%	90	82%	59,040

Trade	Yes		No		N/A		Don't Know		Not Reporting	
Lowered overall productivity	7.8%	3,650	5.0%	2,310	0.0%	10	0.0%	20	87%	40,690
Reduced product or service quality	6.6%	3,080	6.0%	2,790	0.3%	120	0.0%	0	87%	40,690
Reduced production output or sales	9.4%	4,390	3.4%	1,600	0.0%	-	0.0%	0	87%	40,690
Prevented firm from expanding its facilities	2.7%	1,270	9.3%	4,350	0.7%	310	0.1%	50	87%	40,690
Prevented firm from developing new products/services	2.0%	950	9.7%	4,510	1.0%	480	0.1%	50	87%	40,690
Caused firm to move some operations out of Washington	0.2%	110	12.0%	5,620	0.4%	200	0.1%	50	87%	40,690

Other	Yes		No		N/A		Don't Know		Not Reporting	
Lowered overall productivity	16.0%	4,790	5.5%	1,640	0.1%	40	0.0%	0	78%	23,490
Reduced product or service quality	9.8%	2,940	11.6%	3,480	0.1%	30	0.1%	20	78%	23,490
Reduced production output or sales	11.3%	3,390	9.9%	2,960	0.3%	100	0.1%	20	78%	23,490
Prevented firm from expanding its facilities	12.8%	3,840	8.7%	2,600	0.1%	30	0.0%	0	78%	23,490
Prevented firm from developing new products/services	12.1%	3,620	8.8%	2,640	0.5%	160	0.1%	40	78%	23,490
Caused firm to move some operations out of Washington	6.0%	1,790	15.5%	4,650	0.1%	30	0.0%	0	78%	23,490

Question 8

How much difficulty has your firm/organization experienced with entry-level workers demonstrating the following skills?

Agriculture	Much Difficulty		Some Difficulty		No Difficulty		Don't Know		Not Reporting	
Speaks so others can understand	119	2%	198	4%	330	6%	93	2%	4,480	86%
Listen actively	79	2%	396	8%	172	3%	93	2%	4,480	86%
Read with understanding	93	2%	238	5%	264	5%	145	3%	4,480	86%
Observe critically	132	3%	251	5%	225	4%	119	2%	4,480	86%
Cooperate with others	26	1%	317	6%	264	5%	132	3%	4,480	86%
Resolve conflict and negotiate	93	2%	304	6%	225	4%	119	2%	4,480	86%
Use math to solve problems and communicate	106	2%	172	3%	172	3%	264	5%	4,480	86%
Solve problems and make decisions	132	3%	317	6%	145	3%	145	3%	4,480	86%
Take responsibility for learning	145	3%	330	6%	145	3%	119	2%	4,480	86%
Use information and communications technology	93	2%	145	3%	225	4%	278	5%	4,480	86%

Construction	Much Difficulty		Some Difficulty		No Difficulty		Don't Know		Not Reporting	
Speaks so others can understand	45	0%	164	1%	388	3%	254	2%	12,450	94%
Listen actively	30	0%	447	3%	164	1%	209	2%	12,450	94%
Read with understanding	60	0%	283	2%	298	2%	209	2%	12,450	94%
Observe critically	75	1%	343	3%	179	1%	254	2%	12,450	94%
Cooperate with others	30	0%	268	2%	328	2%	224	2%	12,450	94%
Resolve conflict and negotiate	30	0%	283	2%	283	2%	254	2%	12,450	94%
Use math to solve problems and communicate	15	0%	268	2%	268	2%	298	2%	12,450	94%
Solve problems and make decisions	89	1%	343	3%	194	1%	224	2%	12,450	94%
Take responsibility for learning	179	1%	254	2%	224	2%	194	1%	12,450	94%
Use information and communications technology	30	0%	209	2%	254	2%	358	3%	12,450	94%

High Tech	Much Difficulty		Some Difficulty		No Difficulty		Don't Know		Not Reporting	
Speaks so others can understand	13	0%	122	3%	250	7%	115	3%	3,190	86%
Listen actively	-	0%	212	6%	192	5%	96	3%	3,190	86%
Read with understanding	32	1%	167	5%	205	6%	96	3%	3,190	86%
Observe critically	38	1%	192	5%	141	4%	128	3%	3,190	86%
Cooperate with others	-	0%	186	5%	218	6%	96	3%	3,190	86%
Resolve conflict and negotiate	13	0%	205	6%	173	5%	109	3%	3,190	86%
Use math to solve problems and communicate	19	1%	154	4%	167	5%	160	4%	3,190	86%
Solve problems and make decisions	32	1%	192	5%	160	4%	115	3%	3,190	86%
Take responsibility for learning	83	2%	167	5%	154	4%	96	3%	3,190	86%
Use information and communications technology	13	0%	154	4%	186	5%	147	4%	3,190	86%

Manufacturing	Much Difficulty		Some Difficulty		No Difficulty		Don't Know		Not Reporting	
Speaks so others can understand	42	1%	198	4%	385	7%	146	3%	4,370	85%
Listen actively	83	2%	198	4%	364	7%	125	2%	4,370	85%
Read with understanding	42	1%	260	5%	312	6%	156	3%	4,370	85%
Observe critically	83	2%	323	6%	229	4%	135	3%	4,370	85%
Cooperate with others	52	1%	208	4%	385	7%	125	2%	4,370	85%
Resolve conflict and negotiate	73	1%	239	5%	281	5%	177	3%	4,370	85%
Use math to solve problems and communicate	62	1%	208	4%	271	5%	229	4%	4,370	85%
Solve problems and make decisions	104	2%	271	5%	198	4%	198	4%	4,370	85%
Take responsibility for learning	94	2%	312	6%	239	5%	125	2%	4,370	85%
Use information and communications technology	73	1%	219	4%	229	4%	250	5%	4,370	85%

Services	Much Difficulty		Some Difficulty		No Difficulty		Don't Know		Not Reporting	
Speaks so others can understand	533	1%	3,302	5%	5,751	8%	2,982	4%	59,040	82%
Listen actively	320	0%	5,006	7%	4,367	6%	2,876	4%	59,040	82%
Read with understanding	320	0%	3,728	5%	5,325	7%	3,089	4%	59,040	82%
Observe critically	213	0%	4,899	7%	4,473	6%	2,769	4%	59,040	82%
Cooperate with others	533	1%	4,580	6%	4,793	7%	2,663	4%	59,040	82%
Resolve conflict and negotiate	1,065	1%	5,432	8%	2,769	4%	3,195	4%	59,040	82%
Use math to solve problems and communicate	746	1%	2,982	4%	3,621	5%	5,112	7%	59,040	82%
Solve problems and make decisions	959	1%	5,538	8%	2,876	4%	3,089	4%	59,040	82%
Take responsibility for learning	1,278	2%	5,219	7%	3,302	5%	2,769	4%	59,040	82%
Use information and communications technology	959	1%	4,899	7%	3,195	4%	3,621	5%	59,040	82%

Trade	Much Difficulty		Some Difficulty		No Difficulty		Don't Know		Not Reporting	
Speaks so others can understand	312	1%	1,685	4%	3,494	7%	499	1%	40,690	87%
Listen actively	499	1%	2,371	5%	2,870	6%	250	1%	40,690	87%
Read with understanding	437	1%	2,059	4%	3,120	7%	374	1%	40,690	87%
Observe critically	499	1%	2,246	5%	2,870	6%	374	1%	40,690	87%
Cooperate with others	250	1%	2,433	5%	3,120	7%	187	0%	40,690	87%
Resolve conflict and negotiate	499	1%	2,558	5%	2,683	6%	250	1%	40,690	87%
Use math to solve problems and communicate	686	1%	1,435	3%	2,933	6%	936	2%	40,690	87%
Solve problems and make decisions	811	2%	2,496	5%	2,246	5%	374	1%	40,690	87%
Take responsibility for learning	1,186	3%	2,371	5%	2,184	5%	250	1%	40,690	87%
Use information and communications technology	374	1%	2,433	5%	2,246	5%	936	2%	40,690	87%

Other	Much Difficulty		Some Difficulty		No Difficulty		Don't Know		Not Reporting	
Speaks so others can understand	70	0%	1,266	4%	4,149	14%	985	3%	23,490	78%
Listen actively	281	1%	2,532	8%	2,743	9%	914	3%	23,490	78%
Read with understanding	211	1%	2,039	7%	3,165	11%	914	3%	23,490	78%
Observe critically	422	1%	2,039	7%	3,094	10%	844	3%	23,490	78%
Cooperate with others	211	1%	3,024	10%	2,461	8%	774	3%	23,490	78%
Resolve conflict and negotiate	352	1%	3,024	10%	2,039	7%	914	3%	23,490	78%
Use math to solve problems and communicate	352	1%	1,969	7%	2,672	9%	1,407	5%	23,490	78%
Solve problems and make decisions	281	1%	2,883	10%	2,250	8%	985	3%	23,490	78%
Take responsibility for learning	703	2%	2,813	9%	2,180	7%	774	3%	23,490	78%
Use information and communications technology	281	1%	2,110	7%	3,024	10%	1,055	4%	23,490	78%

Question 9

How will your firm's/organization's need for employees with each of the types of education listed below change in the next five years?

Agriculture	Increase	Stay About the Same	Decrease	Not Needed
Neither a high school diploma or GED	7%	49%	3%	41%
High school diploma or GED	8%	67%	2%	23%
Some college course work	13%	51%	0%	36%
Vocational certificate	15%	40%	0%	44%
Vocational associate degree	8%	43%	1%	49%
Academic associate degree (A.A. or A.S.)	5%	39%	1%	55%
Bachelor's degree (B.A. or B.S.)	10%	33%	1%	56%
Master's degree (M.A. or M.S.)	1%	30%	1%	68%
Doctoral or Professional degree	7%	28%	1%	64%

Construction	Increase	Stay About the Same	Decrease	Not Needed
Neither a high school diploma or GED	5%	57%	8%	30%
High school diploma or GED	17%	68%	0%	14%
Some college course work	23%	48%	1%	28%
Vocational certificate	26%	46%	0%	28%
Vocational associate degree	15%	45%	1%	39%
Academic associate degree (A.A. or A.S.)	13%	36%	2%	50%
Bachelor's degree (B.A. or B.S.)	12%	34%	2%	52%
Master's degree (M.A. or M.S.)	2%	25%	3%	71%
Doctoral or Professional degree	1%	21%	2%	75%

High-Tech	Increase	Stay About the Same	Decrease	Not Needed
Neither a high school diploma or GED	9%	36%	3%	51%
High school diploma or GED	18%	50%	1%	31%
Some college course work	24%	48%	2%	26%
Vocational certificate	23%	45%	0%	32%
Vocational associate degree	18%	44%	1%	35%
Academic associate degree (A.A. or A.S.)	19%	44%	0%	36%
Bachelor's degree (B.A. or B.S.)	36%	36%	0%	28%
Master's degree (M.A. or M.S.)	18%	37%	0%	45%
Doctoral or Professional degree	13%	31%	1%	55%

Manufacturing	Increase	Stay About the Same	Decrease	Not Needed
Neither a high school diploma or GED	11%	50%	4%	36%
High school diploma or GED	18%	61%	4%	16%
Some college course work	25%	50%	2%	22%
Vocational certificate	27%	47%	1%	25%
Vocational associate degree	17%	51%	1%	31%
Academic associate degree (A.A. or A.S.)	10%	47%	1%	42%
Bachelor's degree (B.A. or B.S.)	14%	40%	2%	43%
Master's degree (M.A. or M.S.)	5%	32%	2%	61%
Doctoral or Professional degree	1%	29%	3%	67%

Other	Increase	Stay About the Same	Decrease	Not Needed
Neither a high school diploma or GED	5%	36%	6%	53%
High school diploma or GED	16%	63%	2%	18%
Some college course work	26%	55%	0%	19%
Vocational certificate	23%	39%	1%	36%
Vocational associate degree	21%	38%	1%	40%
Academic associate degree (A.A. or A.S.)	20%	47%	2%	30%
Bachelor's degree (B.A. or B.S.)	12%	46%	4%	39%
Master's degree (M.A. or M.S.)	6%	35%	3%	55%
Doctoral or Professional degree	3%	63%	3%	61%

Services	Increase	Stay About the Same	Decrease	Not Needed
Neither a high school diploma or GED	7%	53%	7%	33%
High school diploma or GED	9%	57%	0%	31%
Some college course work	16%	56%	1%	26%
Vocational certificate	17%	48%	0%	33%
Vocational associate degree	14%	47%	1%	36%
Academic associate degree (A.A. or A.S.)	18%	41%	2%	37%
Bachelor's degree (B.A. or B.S.)	24%	34%	1%	40%
Master's degree (M.A. or M.S.)	7%	27%	2%	61%
Doctoral or Professional degree	9%	29%	1%	57%

Trade	Increase	Stay About the Same	Decrease	Not Needed
Neither a high school diploma or GED	7%	53%	7%	33%
High school diploma or GED	14%	73%	1%	13%
Some college course work	17%	58%	1%	23%
Vocational certificate	15%	55%	0%	29%
Vocational associate degree	12%	52%	0%	36%
Academic associate degree (A.A. or A.S.)	11%	53%	1%	36%
Bachelor's degree (B.A. or B.S.)	10%	41%	2%	46%
Master's degree (M.A. or M.S.)	6%	32%	3%	59%
Doctoral or Professional degree	3%	29%	1%	66%

Question 10

In the last three years, have the skills required to adequately perform production or support jobs (primary or front-line services or support jobs) increased, decreased or remained the same?

	Increased		Stay Same		Decreased		Don't Know		Total
Agriculture	22%	1,130	67%	3,510	9%	470	1%	40	5,220
Construction	31%	4,140	58%	7,690	11%	1,460	0%	-	13,300
High-Tech	40%	1,480	54%	2,000	4%	150	2%	60	3,690
Manufacturing	32%	1,620	62%	3,190	6%	300	0%	-	5,140
Services	44%	31,600	45%	32,390	4%	3,160	6%	4,520	71,820
Trade	20%	9,290	73%	34,170	6%	2,660	1%	330	46,680
Other	40%	11,920	54%	16,270	6%	1,740	0%	30	29,960
All	35%	61,885	56%	99,151	6%	10,021	3%	4,922	175,810

Question 11

Did your firm/organization provided or pay for any classroom training, workshops, or seminars (lasting at least four hours) for any employees in the last 12 months?

	Yes		No		Total
Agriculture	42%	2,172	58%	3,028	5,220
Construction	57%	7,594	43%	5,692	13,300
High-Tech	55%	2,018	45%	1,661	3,690
Manufacturing	40%	2,071	60%	3,058	5,140
Services	65%	46,468	35%	25,065	71,820
Trade	44%	20,539	56%	26,001	46,680
Other	69%	20,762	31%	9,168	29,960
All	58%	101,788	42%	73,660	175,800

Question 12

What percentage received classroom training, workshops, or seminars (lasting at least 4 hours) did each type of employee received in the last 12 months?

Agriculture	
Managerial and administrative occupations	53%
Professional occupations	52%
Technical and paraprofessional occupations	44%
Marketing and sales-related occupations	31%
Clerical and administrative support occupations	42%
Service occupations	38%
Production, construction, operation, maintenance, and material-handling occupations	39%
Agricultural, forestry, fishing, and related occupations	41%

Construction	
Managerial and administrative occupations	50%
Professional occupations	37%
Technical and paraprofessional occupations	40%
Marketing and sales-related occupations	29%
Clerical and administrative support occupations	29%
Service occupations	22%
Production, construction, operation, maintenance, and material-handling occupations	50%
Agricultural, forestry, fishing, and related occupations	3%

High Tech	
Managerial and administrative occupations	43%
Professional occupations	36%
Technical and paraprofessional occupations	38%
Marketing and sales-related occupations	37%
Clerical and administrative support occupations	30%
Service occupations	11%
Production, construction, operation, maintenance, and material-handling occupations	21%
Agricultural, forestry, fishing, and related occupations	2%

Manufacturing	
Managerial and administrative occupations	36%
Professional occupations	19%
Technical and paraprofessional occupations	37%
Marketing and sales-related occupations	28%
Clerical and administrative support occupations	20%
Service occupations	14%
Production, construction, operation, maintenance, and material-handling occupations	33%
Agricultural, forestry, fishing, and related occupations	5%

Services	
Managerial and administrative occupations	59%
Professional occupations	54%
Technical and paraprofessional occupations	36%
Marketing and sales-related occupations	18%
Clerical and administrative support occupations	35%
Service occupations	42%
Production, construction, operation, maintenance, and material-handling occupations	37%
Agricultural, forestry, fishing, and related occupations	3%

Trade	
Managerial and administrative occupations	59%
Professional occupations	32%
Technical and paraprofessional occupations	45%
Marketing and sales-related occupations	50%
Clerical and administrative support occupations	33%
Service occupations	43%
Production, construction, operation, maintenance, and material-handling occupations	38%
Agricultural, forestry, fishing, and related occupations	6%

Other	
Managerial and administrative occupations	74%
Professional occupations	46%
Technical and paraprofessional occupations	50%
Marketing and sales-related occupations	54%
Clerical and administrative support occupations	52%
Service occupations	32%
Production, construction, operation, maintenance, and material-handling occupations	31%
Agricultural, forestry, fishing, and related occupations	10%

Question 13

What percent of your current employees would you say need further training in a formal program in order to reach the current level of productivity and competence that your company needs?

	A community college or technical theatre	A four-year college or university
Agriculture	10.3%	2.0%
Construction	11.1%	0.7%
High-Tech	11.5%	5.5%
Manufacturing	11.4%	1.1%
Services	20.2%	8.2%
Trade	5.5%	2.3%
Other	13.7%	6.4%

Question 14

In the last three years, has the percentage of your employees who receive classroom training, workshops, or seminars of some kind increased, decreased, or stayed the same?

	Increased		Remain the Same		Decrease		N/A	
Agriculture	29%	1,520	66%	3,430	5.1%	270		0
Construction	28%	3,710	63%	8,390	7.3%	970	1.7%	220
High-Tech	34%	1,260	59%	2,170	5.7%	210	1.0%	40
Manufacturing	27%	1,390	67%	3,460	5.3%	270		0
Services	24%	16,890	69%	49,890	6.2%	4,460	.8%	580
Trade	30%	14,220	67%	31,070	3.0%	1,380		0
Other	27%	8,080	64%	19,110	7.7%	2,320	1.5%	450

Question 15

Which of the following are reasons for your increase in training?

Agriculture		Yes		No		N/A		Not Reporting	
q15a	Changes in products or services you provide	588	11%	360	7%	-	0.0%	3,700	71%
q15b	Changes in technology	1,134	22%	288	6%	-	0.0%	3,700	71%
q15c	Changes in the organization of work	635	12%	370	7%	-	0.0%	3,700	71%
q15d	Need to improve the quality of your output	1,235	24%	231	4%	-	0.0%	3,700	71%
q15e	Need to improve worker productivity	1,032	20%	331	6%	-	0.0%	3,700	71%
q15f	New hires did not have necessary skills	918	18%	363	7%	-	0.0%	3,700	71%
q15g	To help employees develop more positive attitudes and work habits	969	19%	351	7%	-	0.0%	3,700	71%
q15h	To keep up with competition from foreign countries	230	4%	195	4%	-	0.0%	3,700	71%
q15i	To keep up with competitors at home	967	19%	352	7%	-	0.0%	3,700	71%
q15j	To improve the morale of employees	972	19%	350	7%	-	0.0%	3,700	71%
q15k	To develop a more flexible and versatile workforce	1,008	19%	339	6%	-	0.0%	3,700	71%
q15l	To promote the personal or career development of employees	1,160	22%	274	5%	-	0.0%	3,700	71%

Construction		Yes		No		N/A		Not Reporting	
q15a	Changes in products or services you provide	2,427	18%	841	6%	-	0.0%	9,586	72%
q15b	Changes in technology	2,806	21%	686	5%	-	0.0%	9,586	72%
q15c	Changes in the organization of work	1,342	10%	857	6%	-	0.0%	9,586	72%
q15d	Need to improve the quality of your output	2,461	19%	830	6%	-	0.0%	9,586	72%
q15e	Need to improve worker productivity	1,850	14%	928	7%	-	0.0%	9,586	72%
q15f	New hires did not have necessary skills	1,592	12%	903	7%	-	0.0%	9,586	72%
q15g	To help employees develop more positive attitudes and work habits	1,385	10%	793	6%	-	0.0%	9,586	72%
q15h	To keep up with competition from foreign countries	331	2%	283	2%	15	0.1%	9,586	72%
q15i	To keep up with competitors at home	2,127	16%	793	6%	-	0.0%	9,586	72%
q15j	To improve the morale of employees	1,030	8%	744	6%	-	0.0%	9,586	72%
q15k	To develop a more flexible and versatile workforce	2,449	18%	834	6%	-	0.0%	9,586	72%
q15l	To promote the personal or career development of employees	2,465	19%	829	6%	-	0.0%	9,586	72%

	High Tech		Yes		No		N/A		Not Reporting	
q15a	Changes in products or services you provide	952	26%	235	6%	-	0.0%	2,426	66%	
q15b	Changes in technology	1,101	30%	142	4%	-	0.0%	2,426	66%	
q15c	Changes in the organization of work	891	24%	257	7%	-	0.0%	2,426	66%	
q15d	Need to improve the quality of your output	873	24%	153	4%	-	0.0%	2,426	66%	
q15e	Need to improve worker productivity	692	19%	313	8%	-	0.0%	2,426	66%	
q15f	New hires did not have necessary skills	661	18%	315	9%	-	0.0%	2,426	66%	
q15g	To help employees develop more positive attitudes and work habits	565	15%	312	8%	-	0.0%	2,426	66%	
q15h	To keep up with competition from foreign countries	300	8%	227	6%	-	0.0%	2,426	66%	
q15i	To keep up with competitors at home	994	27%	212	6%	-	0.0%	2,426	66%	
q15j	To improve the morale of employees	814	22%	290	8%	-	0.0%	2,426	66%	
q15k	To develop a more flexible and versatile workforce	1,035	28%	187	5%	-	0.0%	2,426	66%	
q15l	To promote the personal or career development of employees	1,184	32%	75	2%	-	0.0%	2,426	66%	

	Manufacturing		Yes		No		N/A		Not Reporting	
q15a	Changes in products or services you provide	949	18%	302	6%	-	0.0%	3,748	73%	
q15b	Changes in technology	906	18%	316	6%	-	0.0%	3,748	73%	
q15c	Changes in the organization of work	859	17%	329	6%	-	0.0%	3,748	73%	
q15d	Need to improve the quality of your output	834	16%	335	7%	-	0.0%	3,748	73%	
q15e	Need to improve worker productivity	1,212	24%	157	3%	-	0.0%	3,748	73%	
q15f	New hires did not have necessary skills	717	14%	348	7%	-	0.0%	3,748	73%	
q15g	To help employees develop more positive attitudes and work habits	769	15%	344	7%	-	0.0%	3,748	73%	
q15h	To keep up with competition from foreign countries	423	8%	295	6%	-	0.0%	3,748	73%	
q15i	To keep up with competitors at home	912	18%	314	6%	-	0.0%	3,748	73%	
q15j	To improve the morale of employees	699	14%	348	7%	-	0.0%	3,748	73%	
q15k	To develop a more flexible and versatile workforce	1,032	20%	267	5%	-	0.0%	3,748	73%	
q15l	To promote the personal or career development of employees	766	15%	345	7%	-	0.0%	3,748	73%	

Services		Yes		No		N/A		Not Reporting	
q15a	Changes in products or services you provide	9,278	13%	4,148	6%	-	0.0%	54,929	76%
q15b	Changes in technology	8,470	12%	4,223	6%	-	0.0%	54,929	76%
q15c	Changes in the organization of work	9,959	14%	3,956	6%	-	0.0%	54,929	76%
q15d	Need to improve the quality of your output	12,932	18%	3,031	4%	-	0.0%	54,929	76%
q15e	Need to improve worker productivity	10,507	15%	3,971	6%	-	0.0%	54,929	76%
q15f	New hires did not have necessary skills	9,769	14%	4,119	6%	-	0.0%	54,929	76%
q15g	To help employees develop more positive attitudes and work habits	10,960	15%	3,780	5%	-	0.0%	54,929	76%
q15h	To keep up with competition from foreign countries	429	1%	418	1%	-	0.0%	54,929	76%
q15i	To keep up with competitors at home	6,436	9%	3,899	5%	-	0.0%	54,929	76%
q15j	To improve the morale of employees	12,240	17%	3,370	5%	-	0.0%	54,929	76%
q15k	To develop a more flexible and versatile workforce	13,172	18%	2,900	4%	-	0.0%	54,929	76%
q15l	To promote the personal or career development of employees	15,022	21%	1,662	2%	-	0.0%	54,929	76%
Trade		Yes		No		N/A		Not Reporting	
q15a	Changes in products or services you provide	9,499	20%	3,155	7%	-	0.0%	32,458	70%
q15b	Changes in technology	8,699	19%	3,378	7%	-	0.0%	32,458	70%
q15c	Changes in the organization of work	7,955	17%	3,506	8%	-	0.0%	32,458	70%
q15d	Need to improve the quality of your output	10,944	23%	2,523	5%	-	0.0%	32,458	70%
q15e	Need to improve worker productivity	6,153	13%	3,488	7%	-	0.0%	32,458	70%
q15f	New hires did not have necessary skills	8,338	18%	3,403	7%	-	0.0%	32,458	70%
q15g	To help employees develop more positive attitudes and work habits	10,223	22%	2,875	6%	-	0.0%	32,458	70%
q15h	To keep up with competition from foreign countries	3,244	7%	2,483	5%	-	0.0%	32,458	70%
q15i	To keep up with competitors at home	10,909	23%	2,542	5%	-	0.0%	32,458	70%
q15j	To improve the morale of employees	8,521	18%	3,416	7%	-	0.0%	32,458	70%
q15k	To develop a more flexible and versatile workforce	9,132	20%	2,440	5%	-	0.0%	32,458	70%
q15l	To promote the personal or career development of employees	10,488	22%	2,754	6%	-	0.0%	32,458	70%
Other		Yes		No		N/A		Not Reporting	
q15a	Changes in products or services you provide	3,643	12%	1,928	6%	-	0.0%	21,883	73%
q15b	Changes in technology	5,058	17%	1,874	6%	-	0.0%	21,883	73%
q15c	Changes in the organization of work	4,443	15%	1,964	7%	-	0.0%	21,883	73%
q15d	Need to improve the quality of your output	5,328	18%	1,814	6%	-	0.0%	21,883	73%
q15e	Need to improve worker productivity	4,736	16%	1,927	6%	-	0.0%	21,883	73%
q15f	New hires did not have necessary skills	4,244	14%	1,853	6%	-	0.0%	21,883	73%
q15g	To help employees develop more positive attitudes and work habits	4,075	14%	2,019	7%	-	0.0%	21,883	73%
q15h	To keep up with competition from foreign countries	407	1%	386	1%	-	0.0%	21,883	73%
q15i	To keep up with competitors at home	3,892	13%	2,017	7%	-	0.0%	21,883	73%
q15j	To improve the morale of employees	4,066	14%	1,922	6%	-	0.0%	21,883	73%
q15k	To develop a more flexible and versatile workforce	4,268	14%	2,013	7%	-	0.0%	21,883	73%
q15l	To promote the personal or career development of employees	6,857	23%	989	3%	-	0.0%	21,883	73%

Question 16

Has your firm/organization ever had an arrangement with a community of technical college to provide education and training services to your employees?

	Yes		No	
Agriculture	11%	560	89%	4,637
Construction	22%	2,912	75%	9,924
High-Tech	9%	334	91%	3,356
Manufacturing	10%	524	89%	4,600
Services	20%	14,428	77%	55,576
Trade	10%	4,582	90%	41,924
Other	19%	5,629	81%	24,187
All	17%	28,969	82%	144,205

Question 17

Why did you select a community or technical college to conduct training?

Agriculture		Yes		No		N/A		Don't Know		Refused	
q17a	Cost-effective value for money	46%	257	44%	248	10%	55		-		-
q17b	Quality of instruction	80%	445	20%	115		-		-		-
q17c	Community or technical college customized the training program for our needs	85%	477	15%	83		-		-		-
q17d	Convenient location	72%	404	28%	156		-		-		-
q17e	Training programs referred to us by other businesses	39%	216	61%	344		-		-		-
q17f	Contracted with community or technical college in the past with satisfactory results	76%	428	17%	96		-		-	7%	36

Construction		Yes		No		N/A		Don't Know		Refused	
q17a	Cost-effective value for money	78%	2,269	21%	625		-		-	1%	18
q17b	Quality of instruction	77%	2,250	22%	636	1%	26		-		-
q17c	Community or technical college customized the training program for our needs	88%	2,559	11%	320		-		-	1%	33
q17d	Convenient location	73%	2,133	27%	780		-		-		-
q17e	Training programs referred to us by other businesses	21%	611	76%	2,224		-		-	3%	77
q17f	Contracted with community or technical college in the past with satisfactory results	72%	2,085	28%	827		-		-		-

High Tech		Yes		No		N/A		Don't Know		Refused	
q17a	Cost-effective value for money	54%	182	12%	39	1%	3		-	33%	110
q17b	Quality of instruction	94%	314		-	6%	21		-		-
q17c	Community or technical college customized the training program for our needs	75%	251	24%	81	1%	3		-		-
q17d	Convenient location	96%	323	3%	9	1%	3		-		-
q17e	Training programs referred to us by other businesses	7%	24	89%	299	1%	3		-	3%	9
q17f	Contracted with community or technical college in the past with satisfactory results	65%	217	25%	82	5%	18	5%	18		-

Manufacturing		Yes		No		N/A		Don't Know		Refused	
q17a	Cost-effective value for money	90%	471	10%	53		-		-		-
q17b	Quality of instruction	82%	429	18%	95		-		-		-
q17c	Community or technical college customized the training program for our needs	79%	414	21%	111		-		-		-
q17d	Convenient location	81%	426	19%	98		-		-		-
q17e	Training programs referred to us by other businesses	39%	202	61%	322		-		-		-
q17f	Contracted with community or technical college in the past with satisfactory results	81%	424	19%	100		-		-		-

Services		Yes		No		N/A		Don't Know		Refused	
q17a	Cost-effective value for money	51%	7,310	41%	5,985	2%	352	3%	442	2%	340
q17b	Quality of instruction	82%	11,815	16%	2,273		-		-	2%	340
q17c	Community or technical college customized the training program for our needs	76%	11,003	20%	2,863		-		-	4%	562
q17d	Convenient location	92%	13,254	7%	951		-		-	2%	222
q17e	Training programs referred to us by other businesses	43%	6,208	48%	6,860		-	6%	883	3%	476
q17f	Contracted with community or technical college in the past with satisfactory results	78%	11,207	21%	2,980		-		-	2%	241

Trade		Yes		No		N/A		Don't Know		Refused	
q17a	Cost-effective value for money	76%	3,494	7%	307		-	4%	199	13%	582
q17b	Quality of instruction	44%	2,005	52%	2,375		-	0%	16	4%	187
q17c	Community or technical college customized the training program for our needs	44%	2,002	50%	2,296		-	0%	16	6%	269
q17d	Convenient location	87%	3,994	11%	496		-	0%	16	2%	76
q17e	Training programs referred to us by other businesses	23%	1,050	70%	3,190		-		-	7%	341
q17f	Contracted with community or technical college in the past with satisfactory results	88%	4,019	11%	496		-		-	1%	66

Other		Yes		No		N/A		Don't Know		Refused	
<i>q17a</i>	Cost-effective value for money	81%	4,552	16%	885	%	21	0%	6	3%	165
<i>q17b</i>	Quality of instruction	78%	4,383	14%	814	%	21	2%	89	6%	321
<i>q17c</i>	Community or technical college customized the training program for our needs	83%	4,662	12%	683	2%	101	0%	6	3%	178
<i>q17d</i>	Convenient location	83%	4,644	14%	789	%	21	0%	6	3%	168
<i>q17e</i>	Training programs referred to us by other businesses	10%	560	83%	4,684	%	21	2%	89	5%	275
<i>q17f</i>	Contracted with community or technical college in the past with satisfactory results	71%	4,017	19%	1,092	3%	187	0%	6	6%	327

Question 18

In the last 12 months, did your firm provide or pay for classroom training, workshops, or seminars (lasting at least four hours) in work-place practices for any employee?

Among those who provided classroom training in the last 12 months (Q11=Yes)

	2003	2005	2007	2010
Agriculture	63%	69%	61%	52%
Construction	59%	69%	55%	73%
High-Tech	49%	39%	28%	48%
Manufacturing	68%	66%	44%	58%
Services	68%	73%	39%	68%
Trade	60%	66%	45%	65%
Other	78%	68%	72%	73%
All Industries	67%	67%	50%	67%

Question 19

In the past 12 months, did your firm/organization provide or pay for classroom training, workshops, or seminars (lasting at least four hours) in basic skills for any employee?

Among those who provided classroom training in the last 12 months (Q11=Yes)

	2003	2005	2007	2010
Agriculture	15%	13%	10%	8%
Construction	7%	5%	24%	12%
High-Tech	12%	21%	29%	15%
Manufacturing	10%	12%	25%	7%
Services	8%	22%	8%	25%
Trade	18%	21%	21%	16%
Other	18%	20%	23%	38%
All Industries	13%	19%	16%	23%

Question 20

In the past 12 months, did your firm/organization provide or pay for classroom training, workshops, or seminars (lasting at least four hours) in job-specific skills for any employee?

Among those who provided classroom training in the last 12 months (Q11=Yes)

	2003	2005	2007	2010
Agriculture	85%	91%	78%	69%
Construction	84%	79%	73%	80%
High-Tech	78%	97%	92%	73%
Manufacturing	74%	70%	79%	58%
Services	80%	91%	64%	85%
Trade	56%	90%	70%	61%
Other	85%	82%	85%	84%
All Industries	74%	88%	72%	77%

Question 21

Did your firm/organization have a tuition reimbursement program for any employee during the past 12 months?

Among those who provided classroom training in the last 12 months (Q11=Yes)

	2003	2005	2007	2010
Agriculture	41%	38%	42%	44%
Construction	29%	41%	41%	41%
High-Tech	63%	59%	39%	43%
Manufacturing	53%	35%	53%	43%
Services	34%	65%	24%	49%
Trade	32%	48%	39%	24%
Other	37%	49%	65%	54%
All Industries	35%	50%	39%	44%

Question 22**Was your tuition reimbursement program restricted to job-related training only?***Among those who have a tuition reimbursement program (Q21=Yes)*

	2003	2005	2007	2010
Agriculture	86%	92%	83%	97%
Construction	92%	77%	94%	89%
High-Tech	81%	90%	80%	71%
Manufacturing	82%	56%	53%	80%
Services	92%	98%	81%	89%
Trade	65%	96%	79%	83%
Other	77%	77%	77%	71%
All Industries	80%	91%	79%	83%

Question 23

Did your firm/organization provide at least 4 hours of on the job training that was described in a written plan or agreement for any employee in the last 12 months?

	2003	2005	2007	2010
Agriculture	42%	45%	46%	40%
Construction	40%	34%	32%	38%
High-Tech	53%	36%	29%	41%
Manufacturing	27%	39%	33%	34%
Services	45%	40%	49%	33%
Trade	56%	54%	55%	47%
Other	53%	46%	57%	54%
All Industries	49%	47%	50%	41%

Question 24

For each type of employee listed below, approximately what percentage received on-the-job training in the last 12 months?

Agriculture	
Managerial and administrative occupations	37%
Professional occupations	33%
Technical and paraprofessional occupations	41%
Marketing and sales-related occupations	24%
Clerical and administrative support occupations	39%
Service occupations	31%
Production, construction, operation, maintenance, and material-handling occupations	42%
Agricultural, forestry, fishing, and related occupations	29%

Construction	
Managerial and administrative occupations	36%
Professional occupations	27%
Technical and paraprofessional occupations	36%
Marketing and sales-related occupations	16%
Clerical and administrative support occupations	30%
Service occupations	21%
Production, construction, operation, maintenance, and material-handling occupations	49%
Agricultural, forestry, fishing, and related occupations	4%

High Tech	
Managerial and administrative occupations	43%
Professional occupations	45%
Technical and paraprofessional occupations	43%
Marketing and sales-related occupations	49%
Clerical and administrative support occupations	41%
Service occupations	27%
Production, construction, operation, maintenance, and material-handling occupations	32%
Agricultural, forestry, fishing, and related occupations	4%

Manufacturing	
Managerial and administrative occupations	43%
Professional occupations	27%
Technical and paraprofessional occupations	45%
Marketing and sales-related occupations	41%
Clerical and administrative support occupations	36%
Service occupations	17%
Production, construction, operation, maintenance, and material-handling occupations	49%
Agricultural, forestry, fishing, and related occupations	7%

Services	
Managerial and administrative occupations	52%
Professional occupations	44%
Technical and paraprofessional occupations	40%
Marketing and sales-related occupations	21%
Clerical and administrative support occupations	43%
Service occupations	56%
Production, construction, operation, maintenance, and material-handling occupations	34%
Agricultural, forestry, fishing, and related occupations	1%

Trade	
Managerial and administrative occupations	54%
Professional occupations	37%
Technical and paraprofessional occupations	45%
Marketing and sales-related occupations	49%
Clerical and administrative support occupations	34%
Service occupations	54%
Production, construction, operation, maintenance, and material-handling occupations	34%
Agricultural, forestry, fishing, and related occupations	4%

Other	
Managerial and administrative occupations	55%
Professional occupations	33%
Technical and paraprofessional occupations	42%
Marketing and sales-related occupations	34%
Clerical and administrative support occupations	53%
Service occupations	35%
Production, construction, operation, maintenance, and material-handling occupations	29%
Agricultural, forestry, fishing, and related occupations	7%

Question 25

What percent of your firm's current employees are in jobs that require each of the educational levels listed below.

Agriculture	
Neither a high school diploma or GED	32%
High school diploma or GED	38%
Some college course work	6%
Vocational certificate	4%
Vocational associate degree	2%
Academic associate degree (A.A. or A.S.)	2%
Bachelor's degree (B.A. or B.S.)	9%
Master's degree (M.A. or M.S.)	2%
Doctoral or Professional degree	6%

Construction	
Neither a high school diploma or GED	28%
High school diploma or GED	42%
Some college course work	8%
Vocational certificate	11%
Vocational associate degree	2%
Academic associate degree (A.A. or A.S.)	2%
Bachelor's degree (B.A. or B.S.)	6%
Master's degree (M.A. or M.S.)	0%
Doctoral or Professional degree	0%

High Tech	
Neither a high school diploma or GED	12%
High school diploma or GED	30%
Some college course work	10%
Vocational certificate	5%
Vocational associate degree	3%
Academic associate degree (A.A. or A.S.)	3%
Bachelor's degree (B.A. or B.S.)	27%
Master's degree (M.A. or M.S.)	4%
Doctoral or Professional degree	5%

Manufacturing	
Neither a high school diploma or GED	30%
High school diploma or GED	49%
Some college course work	6%
Vocational certificate	3%
Vocational associate degree	1%
Academic associate degree (A.A. or A.S.)	1%
Bachelor's degree (B.A. or B.S.)	7%
Master's degree (M.A. or M.S.)	0%
Doctoral or Professional degree	0%

Services	
Neither a high school diploma or GED	14%
High school diploma or GED	35%
Some college course work	7%
Vocational certificate	10%
Vocational associate degree	4%
Academic associate degree (A.A. or A.S.)	4%
Bachelor's degree (B.A. or B.S.)	19%
Master's degree (M.A. or M.S.)	4%
Doctoral or Professional degree	2%

Trade	
Neither a high school diploma or GED	30%
High school diploma or GED	48%
Some college course work	8%
Vocational certificate	2%
Vocational associate degree	1%
Academic associate degree (A.A. or A.S.)	2%
Bachelor's degree (B.A. or B.S.)	8%
Master's degree (M.A. or M.S.)	0%
Doctoral or Professional degree	1%

Other	
Neither a high school diploma or GED	6%
High school diploma or GED	57%
Some college course work	10%
Vocational certificate	5%
Vocational associate degree	1%
Academic associate degree (A.A. or A.S.)	5%
Bachelor's degree (B.A. or B.S.)	14%
Master's degree (M.A. or M.S.)	1%
Doctoral or Professional degree	1%

Definition of Industry Sectors Used in the Survey

SIC	INDUSTRY NAME	MAJOR SUB GROUPS (at 2 Digit SIC)	SIC	MAJOR SUB GROUPS (at 2 Digit SIC)
01	Agriculture-Food	AGRICULTURAL PRODUCTION CROPS	44	Other
02	Agriculture-Food	AGRICULTURAL PRODUCTION LIVESTOCK	45	Other
07	Agriculture-Food	AGRICULTURAL SERVICES	46	Other
08	Agriculture-Food	FORESTRY	47	Other
09	Agriculture-Food	FISHING, HUNTING AND TRAPPING	49	Other
20	Agriculture-Food	FOOD AND KINDRED PRODUCTS	60	Other
10	Construction	METAL MINING	61	Other
12	Construction	COAL MINING	62	Other
13	Construction	OIL AND GAS EXTRACTION	63	Other
14	Construction	NONMETALLIC MINERALS, EXCEPT FUELS	64	Other
16	Construction	HEAVY CONSTRUCTION, EX. BUILDING	65	Other
17	Construction	SPECIAL TRADE CONTRACTORS	67	Other
28	High Tech	CHEMICALS AND ALLIED PRODUCTS	70	Services
35	High Tech	INDUSTRIAL MACHINERY AND EQUIPMENT	72	Services
36	High Tech	ELECTRONIC AND OTHER ELECTRIC EQUIPMENT	73	Services
38	High Tech	INSTRUMENTS AND RELATED PRODUCTS	75	Services
48	High Tech	COMMUNICATION	76	Services
73	High Tech	BUSINESS SERVICES	78	Services
87	High Tech	ENGINEERING AND MANAGEMENT SERVICES	79	Services
22	Manufacturing	TEXTILE MILL PRODUCTS	80	Services
23	Manufacturing	APPAREL AND OTHER TEXTILE PRODUCTS	81	Services
24	Manufacturing	LUMBER AND WOOD PRODUCTS	82	Services
25	Manufacturing	FURNITURE AND FIXTURES	83	Services
26	Manufacturing	PAPER AND ALLIED PRODUCTS	84	Services
27	Manufacturing	PRINTING AND PUBLISHING	86	Services
28	Manufacturing	CHEMICALS AND ALLIED PRODUCTS	87	Services
29	Manufacturing	PETROLEUM AND COAL PRODUCTS	89	Services
30	Manufacturing	RUBBER AND MISC PLASTICS PRODUCTS	50	Trade
31	Manufacturing	LEATHER AND LEATHER PRODUCTS	51	Trade
32	Manufacturing	STONE, CLAY, AND GLASS PRODUCTS	52	Trade
33	Manufacturing	PRIMARY METAL INDUSTRIES	53	Trade
34	Manufacturing	FABRICATED METAL PRODUCTS	54	Trade
35	Manufacturing	INDUSTRIAL MACHINERY AND EQUIPMENT	55	Trade
37	Manufacturing	TRANSPORTATION EQUIPMENT	56	Trade
39	Manufacturing	MISCELLANEOUS MANUFACTURING INDUSTRIES	57	Trade
41	Other	LOCAL AND INTERURBAN PASSENGER TRANSIT	58	Trade
42	Other	TRUCKING AND WAREHOUSING	59	Trade
				WATER TRANSPORTATION
				TRANSPORTATION BY AIR
				PIPELINES, EXCEPT NATURAL GAS
				TRANSPORTATION SERVICES
				ELECTRIC, GAS, AND SANITARY SERVICES
				DEPOSITORY INSTITUTIONS
				NONDEPOSITORY INSTITUTIONS
				SECURITY AND COMMODITY BROKERS
				INSURANCE CARRIERS
				INSURANCE AGENTS, BROKERS, & SERVICE
				REAL ESTATE
				HOLDING AND OTHER INVESTMENT OFFICES
				HOTELS AND OTHER LODGING PLACES
				PERSONAL SERVICES
				BUSINESS SERVICES
				AUTO REPAIR SERVICES AND PARKING
				MISCELLANEOUS REPAIR SERVICES
				MOTION PICTURES
				AMUSEMENT AND RECREATION SERVICES
				HEALTH SERVICES
				LEGAL SERVICES
				EDUCATIONAL SERVICES
				SOCIAL SERVICES
				MUSEUMS, BOTANICAL, ZOOLOGICAL GARDENS
				MEMBERSHIP ORGANIZATIONS
				ENGINEERING AND MANAGEMENT SERVICES
				SERVICES, NEC
				WHOLESALE TRADE DURABLE GOODS
				WHOLESALE TRADE NONDURABLE GOODS
				BUILDING MATERIALS & GARDEN SUPPLIES
				GENERAL MERCHANDISE STORES
				FOOD STORES
				AUTO DEALERS AND SERVICE STATIONS
				APPAREL AND ACCESSORY STORES
				FURNITURE AND HOME FURNISHING STORES
				EATING AND DRINKING PLACES
				MISCELLANEOUS RETAIL

Note: Boeing was grouped in Manufacturing rather than Hi-tech.