

# Occupational Projections and Education Level

*Presented by*

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**Washington State  
Employment Security Department**



Labor Market and Economic Analysis

October 21, 2008

# Occupational Projections

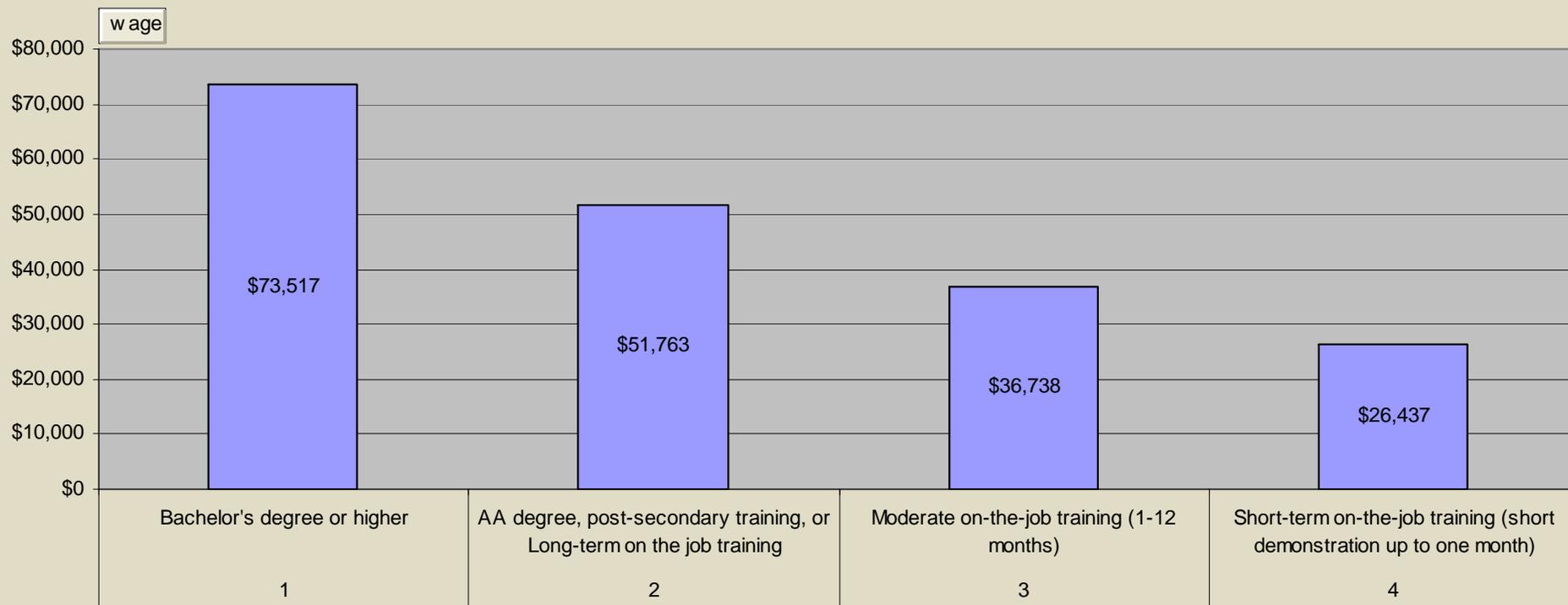
- Detailed industry projections are estimated using detailed industry employment data.
- Occupational staffing patterns estimated using BLS Occupational Employment Statistics data.
- Combine industry projections and staffing patterns to get to occupational projections.
- Estimated for state and 12 workforce development areas.

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	A	B	C	D	E	F	G	H	I	J	K
1	Washington Occupational Employment Projections, June 2008										
2	Washington Employment Security Department, Labor Market and Economic Analysis Branch										
3											

[http://www.workforceexplorer.com/admin/uploadedPublications/1647\\_longoccupt.xls](http://www.workforceexplorer.com/admin/uploadedPublications/1647_longoccupt.xls)

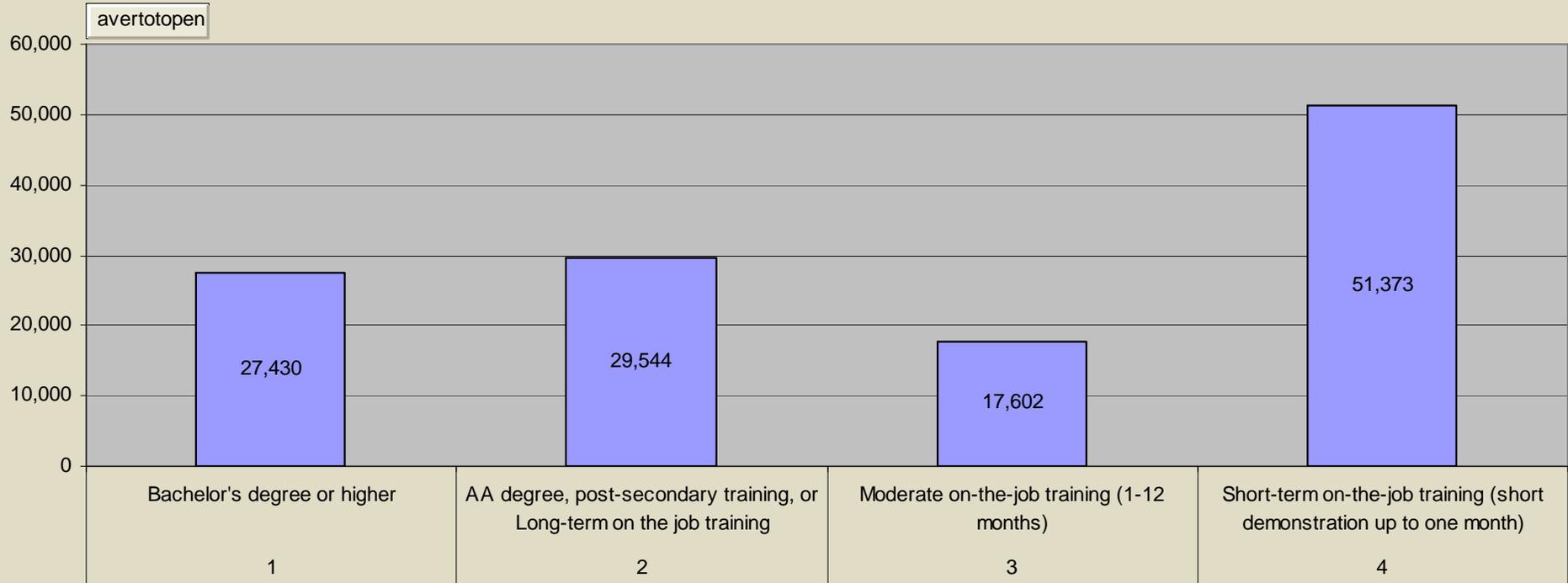
	SOCnumber*	SOCtitle	Est. Emp. 2006	Est. Emp. 2011	Est. Emp. 2016	Avg. Annual Growth Rate 2006-2011	Avg. Annual Growth Rate 2011-2016	Avg. Annual Opening Due to Growth 2006-2011	Avg. Annual Opening Due to Growth 2011-2016	Avg. Annual Total Openings 2006-2011	Avg. Annual Total Openings 2011-2016
7											
8	00-0000	(Total, All Occupations)	3,272,529	3,536,253	3,755,401	1.6%	1.2%	52,735	43,830	129,149	123,369
9	110000	11-0000 (Management Occupations)	115,019	124,827	132,588	1.7%	1.2%	1,959	1,553	4,169	4,546
10	111000	11-1000 (Top Executives)	20,970	22,693	24,074	1.6%	1.2%	345	276	826	891
11	111011	11-1011 (Chief Executives)	2,659	2,913	3,125	1.8%	1.4%	51	42	121	130
12	111021	11-1021 (General and Operations Managers)	17,636	19,066	20,196	1.6%	1.2%	286	226	686	738
13	111031	11-1031 (Legislators)	675	714	753	1.1%	1.1%	8	8	19	23
14	112000	11-2000 (Advertising, Marketing, Promotions, Public Relations, and Fundraising Managers)	9,320	10,219	10,977	1.9%	1.4%	179	152	376	409
15	112011	11-2011 (Advertising and Promotions Managers)	400	458	504	2.7%	1.9%	12	9	20	21
16	112021	11-2021 (Marketing Managers)	2,714	3,066	3,344	2.5%	1.8%	70	56	129	132
17	112022	11-2022 (Sales Managers)	4,838	5,180	5,491	1.4%	1.2%	68	62	170	189
18	112031	11-2031 (Public Relations Managers)	1,368	1,515	1,638	2.1%	1.6%	29	25	57	67
19	113000	11-3000 (Operations Specialties Managers)	27,988	30,563	32,507	1.8%	1.2%	514	389	1,021	1,111
20	113011	11-3011 (Administrative Services Managers)	3,328	3,635	3,877	1.8%	1.3%	61	48	143	158
21	113021	11-3021 (Computer and Information Systems Managers)	6,315	7,316	8,049	3.0%	1.9%	200	147	279	303
22	113031	11-3031 (Financial Managers)	9,829	10,547	11,077	1.4%	1.0%	144	106	265	290
23	113041	11-3041 (Compensation and Benefits Managers)	368	401	430	1.7%	1.4%	7	6	12	15
24	113042	11-3042 (Training and Development Managers)	414	455	492	1.9%	1.6%	8	7	15	18
25	113049	11-3049 (Human Resources Managers, All Other)	1,714	1,875	1,994	1.8%	1.2%	32	24	59	67
26	113051	11-3051 (Industrial Production Managers)	2,455	2,515	2,555	0.5%	0.3%	12	8	95	97
27	113061	11-3061 (Purchasing Managers)	1,168	1,266	1,328	1.6%	1.0%	19	13	51	53
28	113071	11-3071 (Transportation, Storage, and Distribution Managers)	2,397	2,553	2,705	1.3%	1.2%	31	30	102	110
29	119000	11-9000 (Other Management Occupations)	56,741	61,352	65,030	1.6%	1.2%	921	736	1,946	2,135
30	119011	11-9011 (Farm, Ranch, and Other Agricultural Managers)	69	72	74	0.9%	0.5%	1	1	1	1
31	119021	11-9021 (Construction Managers)	9,984	10,463	11,041	0.9%	1.1%	96	116	227	309
32	119031	11-9031 (Education Administrators, Preschool and Child Development)	319	351	380	1.9%	1.6%	6	6	15	17
33	119032	11-9032 (Education Administrators, Elementary and Secondary)	4,818	5,220	5,579	1.6%	1.3%	80	72	206	235
34	119033	11-9033 (Education Administrators, Postsecondary)	2,210	2,393	2,557	1.6%	1.3%	37	33	94	107
35	119039	11-9039 (Education Administrators, All Other)	582	629	670	1.6%	1.3%	9	8	25	28
36	119041	11-9041 (Engineering Managers)	4,714	5,198	5,395	2.0%	0.7%	97	39	180	164
37	119051	11-9051 (Food Service Managers)	2,579	2,818	2,990	1.8%	1.2%	48	34	107	106
38	119061	11-9061 (Funeral Directors)	162	170	176	1.0%	0.7%	2	1	6	5

## Average Annual Wage by Education



edcode  title

# Average Annual Openings by Education Level



edcode  title

## Top Ten Occupations for Washington State

OCCUPATIONAL TITLES	Preparation level	Estimated employment 2006	Average annual growth rate	Average annual total openings	Estimate average wage March 2008
<b>Computer Software Engineers, Applications</b>	Bachelor's degree or higher	24,922	2.90%	1,246	\$86,829
<b>Personal and Home Care Aides</b>	Short-term on-the-job training (short demonstration up to one month)	22,909	2.90%	1,199	\$22,169
<b>Computer Software Engineers, Systems Software</b>	Bachelor's degree or higher	13,760	3.40%	779	\$92,622
<b>Computer Programmers</b>	Bachelor's degree or higher	11,134	3.30%	710	\$82,798
<b>Computer Systems Analysts</b>	Bachelor's degree or higher	12,574	2.60%	761	\$78,478
<b>Landscaping and Grounds keeping Workers</b>	Short-term on-the-job training (short demonstration up to one month)	25,577	2.20%	1,000	\$27,934
<b>Multi-Media Artists and Animators</b>	Bachelor's degree or higher	4,608	3.40%	314	\$57,515
<b>Home Health Aides</b>	Short-term on-the-job training (short demonstration up to one month)	10,071	2.70%	418	\$21,815
<b>Medical Secretaries</b>	Moderate on-the-job training (1-12 months)	17,909	2.20%	757	\$35,006
<b>Hairdressers, Hairstylists, and Cosmetologists</b>	AA degree, post-secondary training, or Long-term on the job training	17,658	2.20%	670	\$29,753

## Top Ten Occupations for Seattle-King County

OCCUPATIONAL TITLES	Preparation level	Estimated employment 2006	Average annual growth rate	Average annual total openings	Estimate average wage March 2008
Computer Software Engineers, Systems Software	Bachelor's degree or higher	11,827	3.60%	705	\$94,324
Computer Software Engineers, Applications	Bachelor's degree or higher	19,779	3.10%	1,046	\$90,256
Computer Programmers	Bachelor's degree or higher	8,745	3.50%	579	\$87,405
Computer Systems Analysts	Bachelor's degree or higher	8,793	2.90%	561	\$81,072
Computer Support Specialists	AA degree, post-secondary training, or Long-term on the job training	6,814	2.50%	428	\$52,210
Multi-Media Artists and Animators	Bachelor's degree or higher	3,367	3.50%	234	\$59,031
Personal and Home Care Aides	Short-term on-the-job training (short demonstration up to one month)	9,731	2.40%	446	\$22,840
Network and Computer Systems Administrators	Bachelor's degree or higher	6,226	2.50%	337	\$76,550
Market Research Analysts	Bachelor's degree or higher	6,662	2.80%	266	\$89,244
Network Systems and Data Communications Analysts	Bachelor's degree or higher	4,762	2.80%	261	\$84,430

## Top Ten Occupations for North Central

OCCUPATIONAL TITLES	Preparation level	Estimated employment 2006	Average annual growth rate	Average annual total openings	Estimate average wage March 2008
Personal and Home Care Aides	Short-term on-the-job training (short demonstration up to one month)	1,348	4.90%	111	\$22,380
Home Health Aides	Short-term on-the-job training (short demonstration up to one month)	475	3.60%	26	\$20,466
Combined Food Preparation and Serving Workers, Including Fast Food	Short-term on-the-job training (short demonstration up to one month)	2,085	1.80%	85	\$19,298
Retail Salespersons	Short-term on-the-job training (short demonstration up to one month)	2,944	1.80%	155	\$25,372
Office Clerks, General	Short-term on-the-job training (short demonstration up to one month)	2,236	1.80%	88	\$26,499
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	Short-term on-the-job training (short demonstration up to one month)	805	1.80%	75	\$18,987
Hairdressers, Hairstylists, and Cosmetologists	AA degree, post-secondary training, or Long-term on the job training	351	2.90%	16	\$22,342
Landscaping and Grounds keeping Workers	Short-term on-the-job training (short demonstration up to one month)	952	1.80%	33	\$26,589
Elementary School Teachers, Except Special Education	Bachelor's degree or higher	1,087	1.70%	46	\$50,417
Welders, Cutters, Soldiers, and Braziers	AA degree, post-secondary training, or Long-term on the job training	214	3.30%	14	\$36,126

rank	Standard Occupational Code	y2006	y2016	grrate	annual total open	wage
	<b>All occupations requiring bachelor's degree or higher</b>	<b>689,343</b>	<b>817,721</b>	<b>1.7%</b>	<b>27,430</b>	<b>\$73,517</b>
1	Computer Software Engineers, Systems Software	13,760	19,160	3.4%	779	\$92,622
2	Computer Software Engineers, Applications	24,922	33,131	2.9%	1,246	\$86,829
3	Computer Programmers	11,134	15,472	3.3%	710	\$82,798
4	Multi-Media Artists and Animators	4,608	6,464	3.4%	314	\$57,515
5	Computer Systems Analysts	12,574	16,328	2.6%	761	\$78,478
6	Architects, Except Landscape and Naval	4,179	5,601	3.0%	235	\$71,993
7	Employment, Recruitment, and Placement Specialists	3,707	5,004	3.0%	223	\$58,508
8	Network Systems and Data Communications Analysts	7,066	9,125	2.6%	372	\$78,786
9	Market Research Analysts	8,507	11,001	2.6%	315	\$84,839
10	Network and Computer Systems Administrators	9,279	11,621	2.3%	472	\$72,586
11	Computer and Information Systems Managers	6,315	8,049	2.5%	291	\$126,720
12	Civil Engineers	13,068	15,981	2.0%	674	\$77,542
13	Community and Social Service Specialists, All Other	3,796	4,920	2.6%	163	\$36,010
14	Physical Therapists	4,023	5,189	2.6%	173	\$69,891
15	Mental Health and Substance Abuse Social Workers	2,331	3,122	3.0%	136	\$37,873

rank	Standard Occupational Codes	y2006	y2016	grrate	Annual totopen	wage
	<b>All occupations requiring AA degree, post-secondary training or long-term on the job training</b>	<b>828,023</b>	<b>948,518</b>	<b>1.4%</b>	<b>29,544</b>	<b>\$51,763</b>
1	Hairdressers, Hairstylists, and Cosmetologists	17,658	21,981	2.2%	670	\$29,753
2	Computer Support Specialists	12,380	15,314	2.1%	720	\$48,186
3	Registered Nurses	50,945	61,910	2.0%	2,032	\$67,433
4	Nursing Aides, Orderlies, and Attendants	23,827	29,099	2.0%	764	\$25,567
5	Massage Therapists	5,153	6,880	2.9%	242	\$56,390
6	Architectural and Civil Drafters	3,360	4,450	2.8%	221	\$47,003
7	Computer Specialists, All Other	6,736	8,340	2.2%	361	\$71,010
8	Sales Representatives, Services, All Other	13,273	16,171	2.0%	635	\$61,068
9	Licensed Practical and Licensed Vocational Nurses	10,180	12,302	1.9%	517	\$42,293
10	Fitness Trainers and Aerobics Instructors	6,354	7,697	1.9%	266	\$39,207
11	First-Line Supervisors/Managers of Personal Service Workers	5,587	6,760	1.9%	250	\$45,509
12	Executive Secretaries and Administrative Assistants	20,029	23,690	1.7%	715	\$44,884
13	Radiologic Technologists and Technicians	3,848	4,752	2.1%	149	\$58,781
14	Photographers	2,689	3,342	2.2%	132	\$38,268
15	Medical Records and Health Information Technicians	4,606	5,564	1.9%	233	\$34,394

rank	Standard Occupational Codes	y2006	y2016	grrate	Annual totopen	wage
	<b>All occupations requiring moderate on-the-job training</b>	<b>572,071</b>	<b>641,618</b>	<b>1.2%</b>	<b>17,602</b>	<b>\$36,738</b>
1	Medical Secretaries	17,909	22,283	2.2%	757	\$35,006
2	Social and Human Service Assistants	6,292	8,227	2.7%	278	\$27,358
3	Medical Assistants	10,325	12,779	2.2%	389	\$31,861
4	Dental Assistants	9,379	11,236	1.8%	364	\$36,539
5	Customer Service Representatives	32,774	37,937	1.5%	1,496	\$31,724
6	Billing and Posting Clerks and Machine Operators	12,394	14,616	1.7%	395	\$33,213
7	Secretaries, Except Legal, Medical, and Executive	28,049	32,552	1.5%	932	\$34,037
8	Demonstrators and Product Promoters	4,118	5,053	2.1%	222	\$22,142
9	Sales and Related Workers, All Other	7,802	9,410	1.9%	239	\$49,847
10	Cooks, Institution and Cafeteria	6,209	7,312	1.6%	291	\$27,611
11	Data Entry Keyers	3,742	4,577	2.0%	185	\$28,577
12	Production Workers, All Other	3,862	4,735	2.1%	176	\$30,518
13	Surveying and Mapping Technicians	1,953	2,577	2.8%	105	\$41,565
14	Bus Drivers, School	10,663	12,299	1.4%	314	\$32,327
15	Bookkeeping, Accounting, and Auditing Clerks	51,572	58,549	1.3%	1,557	\$35,219

rank	Standard Occupational Codes	y2006	y2016	grrate	Annual totopen	wage
	<b>All occupations requiring short-term on-the-job training</b>	<b>1,174,775</b>	<b>1,338,032</b>	<b>1.3%</b>	<b>51,373</b>	<b>\$26,437</b>
1	Personal and Home Care Aides	22,909	30,422	2.9%	1,199	\$22,169
2	Landscaping and Grounds keeping Workers	25,577	31,808	2.2%	1,000	\$27,934
3	Receptionists and Information Clerks	22,726	27,492	1.9%	1,084	\$25,472
4	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	44,954	53,806	1.8%	1,827	\$25,951
5	Home Health Aides	10,071	13,203	2.7%	418	\$21,815
6	Laborers and Freight, Stock, and Material Movers, Hand	47,237	55,877	1.7%	2,498	\$26,306
7	Office Clerks, General	66,136	77,479	1.6%	2,445	\$28,517
8	Amusement and Recreation Attendants	7,072	8,554	1.9%	529	\$20,102
9	Combined Food Preparation and Serving Workers, Including Fast Food	68,635	80,029	1.5%	2,552	\$19,970
10	Waiters and Waitresses	47,997	55,910	1.5%	3,596	\$27,636
11	Interviewers, Except Eligibility and Loan	5,574	6,916	2.2%	297	\$29,324
12	Telemarketers	7,106	8,554	1.9%	416	\$24,898
13	Security Guards	15,321	18,105	1.7%	614	\$28,790
14	Healthcare Support Workers, All Other	5,566	6,909	2.2%	212	\$30,724
15	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	21,968	25,347	1.4%	1,938	\$20,320

# Department of Labor Occupations and Skills Taxonomy

- O\*NET lists specific skills for every Standard Occupational Code plus numerous more detailed occupations.
- Online access at:  
<http://online.onetcenter.org/>
- More information at the “Career Center” on  
[www.workforceexplorer.com](http://www.workforceexplorer.com)

**Thank You for your time and attention!**

Please call or email with any questions:

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