

Alaska's Workforce Future: Employer Survey

Attachments

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Alaska's Workforce Future: Employer Survey

Attachment 1: Employer Recruiting, Hiring, Retaining, and Re-Training Difficulties for the Future

A. Reported Future Difficulty Recruiting New Employees

Industry	Not at All	Not Very	Moderately	Extremely	Grand Total	% Moderate or Extreme
Agriculture	1	1	1	1	4	50.0%
Construction	8	2	22	51	83	88.0%
Ed or Train	3	1	12	18	34	88.2%
Finance / Insurance	1	1	4	6	12	83.3%
Fishing/Hunting	1	4	11	7	23	78.3%
Food/Hospitality	3	5	29	22	59	86.4%
Forestry				1	1	100.0%
Health Care	6	4	17	29	56	82.1%
Info/Media		3	2		5	40.0%
It/Tech/Digital	3	1	5	4	13	69.2%
Manufacturing	2	2	8	7	19	78.9%
Military	2				2	0.0%
Mining	1	1		1	3	33.3%
Nonprofit	1	4	19	20	44	88.6%
Oil & Gas/Energy	1	6	3	9	19	63.2%
Other	6	5	19	58	88	87.5%
Prof/Tech Services	4	17	14	23	58	63.8%
Real Estate	2	3	8	7	20	75.0%
State, Fed, Local Gov.	1	5	7	21	34	82.4%
Telecom		2		8	10	80.0%
Tourism/Travel	2		12	12	26	92.3%
Transportation/Warehouse	1		4	19	24	95.8%
Utilities	1	16	17	12	46	63.0%
Wholesale Trade	2	2	1	3	8	50.0%
Grand Total	52	85	215	339	691	80.2%

B. Reported Future Difficulty Hiring New Employees

Industry	Not at All	Not Very	Moderately	Extremely	Grand Total	% Moderate or Extreme
Agriculture	1	1	1	1	4	50.0%
Construction	8	6	29	40	83	83.1%
Ed or Train	3	3	11	16	33	81.8%
finance / Insurance	1	1	4	5	11	81.8%
Fishing/Hunting	1	2	13	6	22	86.4%
Food/Hospitality	4	11	23	20	58	74.1%
Forestry				1	1	100.0%
Health Care	6	7	18	24	55	76.4%
info/Media	2	1	2		5	40.0%
It/Tech/Digital	3	3	4	3	13	53.8%
Manufacturing	2	2	9	6	19	78.9%
Military	2				2	0.0%
Mining	1		1	1	3	66.7%
Nonprofit	1	8	19	16	44	79.5%
Oil & Gas/Energy	5	2	6	6	19	63.2%
Other	7	10	26	43	86	80.2%
Prof/Tech Services	13	8	27	12	60	65.0%
Real Estate	2	3	9	6	20	75.0%
State, Fed, Local Gov.	2	3	7	21	33	84.8%
Telecom		2	2	6	10	80.0%
Tourism/Travel	1	3	12	10	26	84.6%
Transportation/Warehouse	2		7	16	25	92.0%
Utilities	17	1	17	11	46	60.9%
Wholesale Trade	2	1	4	1	8	62.5%
Grand Total	86	78	251	271	686	76.1%

C. Reported Future Difficulty Retaining New Employees

Industry	Not at All	Not Very	Moderately	Extremely	Grand Total	% Moderate or Extreme
Agriculture	1	1	1	1	4	50.0%
Construction	12	10	31	30	83	73.5%
Ed or Train	3	6	11	14	34	73.5%
finance / Insurance	2	1	4	5	12	75.0%
Fishing/Hunting	1	5	9	8	23	73.9%
Food/Hospitality	4	12	24	18	58	72.4%
Forestry			1		1	100.0%
Health Care	13	7	23	13	56	64.3%
info/Media		4	1		5	20.0%
It/Tech/Digital	4	4	3	2	13	38.5%
Manufacturing	3	2	9	5	19	73.7%
Military	2				2	0.0%
Mining	1	1		1	3	33.3%
Nonprofit	2	8	17	17	44	77.3%
Oil & Gas/Energy	1	6	9	3	19	63.2%
Other	15	12	23	37	87	69.0%
Prof/Tech Services	6	25	20	9	60	48.3%
Real Estate	3	2	2	13	20	75.0%
State, Fed, Local Gov.	2	4	10	17	33	81.8%
Telecom	1	1	1	7	10	80.0%
Tourism/Travel	4	6	14	3	27	63.0%
Transportation/Warehouse	2	3	6	14	25	80.0%
Utilities		16	11	19	46	65.2%
Wholesale Trade	2	1	1	4	8	62.5%
Grand Total	84	137	231	240	692	68.1%

D. Reported Future Difficulty Re-Training New Employees

Industry	Not at All	Not Very	Moderately	Extremely	Grand Total	% Moderate or Extreme
Agriculture	2	1		1	4	25.0%
Construction	15	15	34	19	83	63.9%
Ed or Train	6	4	13	11	34	70.6%
finance / Insurance	1	3	5	3	12	66.7%
Fishing/Hunting	3	5	13	2	23	65.2%
Food/Hospitality	13	15	21	9	58	51.7%
Forestry				1	1	100.0%
Health Care	16	20	11	9	56	35.7%
info/Media		3	1	1	5	40.0%
It/Tech/Digital	4	4	1	4	13	38.5%
Manufacturing	5	2	7	5	19	63.2%
Military	2				2	0.0%
Mining	1		2		3	66.7%
Nonprofit	4	9	20	11	44	70.5%
Oil & Gas/Energy	3	6	8	2	19	52.6%
Other	16	22	21	28	87	56.3%
Prof/Tech Services	13	23	18	4	58	37.9%
Real Estate	2	4	10	4	20	70.0%
State, Fed, Local Gov.	3	7	16	7	33	69.7%
Telecom	1	1	7	1	10	80.0%
Tourism/Travel	3	10	10	3	26	50.0%
Transportation/Warehouse	4	5	5	11	25	64.0%
Utilities	1	17	26	2	46	60.9%
Wholesale Trade	2	1	3	1	7	57.1%
Grand Total	120	177	252	139	688	56.8%

Alaska's Workforce Future: Employer Survey

Attachment 2: Current Recruiting, Hiring, Retaining, and Re-Training Difficulties and Supporting Chi-Square Tests by Employer Size

A. Reported Current Difficulty Recruiting New Employees

Industry	Not at All	Not Very	Moderately	Extremely	Grand Total	% Moderate or Extreme
Agriculture	1	1	2		4	50.0%
Construction	9	6	24	46	85	82.4%
Ed or Train	3	3	13	15	34	82.4%
Finance / Insurance	1		7	4	12	91.7%
Fishing/Hunting	1	5	10	6	22	72.7%
Food/Hospitality	3	7	28	23	61	83.6%
Forestry				1	1	100.0%
Health Care	6	5	21	24	56	80.4%
info/Media		3	2		5	40.0%
It/Tech/Digital	3	1	4	5	13	69.2%
Manufacturing	2		11	6	19	89.5%
Military	1			1	2	50.0%
Mining	1	1		1	3	33.3%
Nonprofit	1	5	17	21	44	86.4%
Oil & Gas/Energy	1	7	4	7	19	57.9%
Other	10	2	24	52	88	86.4%
Prof/Tech Services	5	16	13	25	59	64.4%
Real Estate	3	2	10	5	20	75.0%
State, Fed, Local Gov.	1	6	9	18	34	79.4%
Telecom		1	1	8	10	90.0%
Tourism/Travel	2		12	12	26	92.3%
Transportation/Warehouse	1		8	15	24	95.8%
Utilities	1	16	18	11	46	63.0%
Wholesale Trade	2	3		3	8	37.5%
Grand Total	58	90	238	309	695	78.7%

B. Reported Current Difficulty Hiring New Employees

Industry	Not at All	Not Very	Moderately	Extremely	Grand Total	% Moderate or Extreme
Agriculture	1	2	1		4	25.0%
Construction	8	9	31	36	84	79.8%
Ed or Train	3	3	14	13	33	81.8%
finance / Insurance	1	2	2	5	10	70.0%
Fishing/Hunting	1	3	12	4	20	80.0%
Food/Hospitality	4	10	27	17	58	75.9%
Forestry				1	1	100.0%
Health Care	7	9	14	25	55	70.9%
info/Media	2	1	1	1	5	40.0%
It/Tech/Digital	3	4	3	3	13	46.2%
Manufacturing	2	1	11	5	19	84.2%
Military	1		1		2	50.0%
Mining	1		2		3	66.7%
Nonprofit	1	9	23	11	44	77.3%
Oil & Gas/Energy	6	2	5	5	18	55.6%
Other	9	7	49	23	88	81.8%
Prof/Tech Services	14	8	28	10	60	63.3%
Real Estate	2	3	11	4	20	75.0%
State, Fed, Local Gov.	2	3	13	15	33	84.8%
Telecom		1	3	6	10	90.0%
Tourism/Travel	2	2	11	11	26	84.6%
Transportation/Warehouse	2	1	17	5	25	88.0%
Utilities	16	3	18	9	46	58.7%
Wholesale Trade	2	3	2	1	8	37.5%
Grand Total	90	86	299	210	685	74.3%

C. Reported Current Difficulty Retaining New Employees

Industry	Not at All	Not Very	Moderately	Extremely	Grand Total	% Moderate or Extreme
Agriculture	1	1	1	1	4	50.0%
Construction	10	16	37	20	83	68.7%
Ed or Train	4	7	11	12	34	67.6%
finance / Insurance	2	3	3	4	12	58.3%
Fishing/Hunting	3	5	9	5	22	63.6%
Food/Hospitality	7	13	24	16	60	66.7%
Forestry			1		1	100.0%
Health Care	15	11	17	13	56	53.6%
info/Media	1	3	1		5	20.0%
It/Tech/Digital	4	4	3	2	13	38.5%
Manufacturing	3	3	9	4	19	68.4%
Military	2				2	0.0%
Mining	1	1	1		3	33.3%
Nonprofit	3	9	20	12	44	72.7%
Oil & Gas/Energy	1	7	9	2	19	57.9%
Other	20	12	42	12	86	62.8%
Prof/Tech Services	10	24	19	7	60	43.3%
Real Estate	4	3	5	8	20	65.0%
State, Fed, Local Gov.	2	6	16	9	33	75.8%
Telecom	1	1	2	6	10	80.0%
Tourism/Travel	5	6	14	2	27	59.3%
Transportation/Warehouse	3	5	13	4	25	68.0%
Utilities		17	12	17	46	63.0%
Wholesale Trade	2	1	1	4	8	62.5%
Grand Total	104	158	270	160	692	62.1%

D. Reported Current Difficulty Re-Training New Employees

Industry	Not at All	Not Very	Moderately	Extremely	Grand Total	% Moderate or Extreme
Agriculture	2	1	1		4	25.0%
Construction	11	29	28	16	84	52.4%
Ed or Train	6	6	12	10	34	64.7%
finance / Insurance	1	3	5	3	12	66.7%
Fishing/Hunting	3	11	6	2	22	36.4%
Food/Hospitality	15	18	15	11	59	44.1%
Forestry				1	1	100.0%
Health Care	16	22	9	9	56	32.1%
info/Media		3	1	1	5	40.0%
It/Tech/Digital	3	5	2	3	13	38.5%
Manufacturing	5	2	5	7	19	63.2%
Military	2				2	0.0%
Mining	1	1	1		3	33.3%
Nonprofit	4	10	14	16	44	68.2%
Oil & Gas/Energy	3	7	7	2	19	47.4%
Other	20	22	20	24	86	51.2%
Prof/Tech Services	12	29	12	6	59	30.5%
Real Estate	3	5	4	8	20	60.0%
State, Fed, Local Gov.	3	8	16	6	33	66.7%
Telecom	1	1	4	4	10	80.0%
Tourism/Travel	3	9	10	4	26	53.8%
Transportation/Warehouse	3	6	3	13	25	64.0%
Utilities	1	19	10	16	46	56.5%
Wholesale Trade	2	3	1	1	7	28.6%
Grand Total	120	220	186	163	689	50.7%

Chi-Square differences in difficulty Recruiting, Hiring, Retaining, and Retraining by Employer Size Chi-Square differences in difficulty Recruiting, Hiring, Retaining, and Retraining by Employer Size are present

A. Difficulty Recruiting by Employer Size								
	ACTUAL					EXPECTED		
	Moderately or extremely	not at all not very				moderately or extremely	not at all not very	
1-9	213	55	268		1-9	217.434	50.566	268
10-49	137	24	161		10-49	130.623	30.377	161
50-99	19	3	22		50-99	17.849	4.151	22
100-499	38	10	48		100-499	38.943	9.057	48
500+	23	8	31		500+	25.151	5.849	31
p= 0.460	430	100	530			430	100	530

B. Difficulty Hiring by Employer Size								
	ACTUAL					EXPECTED		
	Moderately or extremely	not at all not very				moderately or extremely	not at all not very	
1-9	191	73	264		1-9	198.253	65.747	264
10-49	126	33	159		10-49	119.402	39.598	159
50-99	19	2	21		50-99	15.770	5.230	21
100-499	36	12	48		100-499	36.046	11.954	48
500+	20	10	30		500+	22.529	7.471	30
p= 0.176	392	130	522			392	130	522

C. Difficulty Retaining by Employer Size								
	ACTUAL					EXPECTED		
	Moderately or extremely	not at all not very				moderately or extremely	not at all not very	
1-9	164	104	268		1-9	163.637	104.363	268
10-49	89	72	161		10-49	98.304	62.696	161
50-99	15	6	21		50-99	12.822	8.178	21
100-499	37	11	48		100-499	29.308	18.692	48
500+	18	13	31		500+	18.928	12.072	31
p= 0.075	323	206	529			323	206	529

D. Difficulty Re-Training by Employer Size								
	ACTUAL					EXPECTED		
	Moderately or extremely	not at all not very				moderately or extremely	not at all not very	
1-9	126	141	267		1-9	123.348	143.652	267
10-49	68	93	161		10-49	74.378	86.622	161
50-99	9	12	21		50-99	9.702	11.298	21
100-499	24	22	46		100-499	21.251	24.749	46
500+	16	15	31		500+	14.321	16.679	31
p= 0.691	243	283	526			243	283	526

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Attachment 3: Methods of Recruitment by Employer Size and Employer Region

Chi-Square Tests Methods of Recruitment by Employer Size

	ACTUAL					EXPECTED		
	Social Media	Base				Social Media	Base	
0	4	30	34		0	6.22	27.78	34
1-9	168	663	831		1-9	152.03	678.97	831
10-49	124	477	601		10-49	109.95	491.05	601
50-99	14	72	86		50-99	12.12	73.88	86
100-499	42	278	320		100-499	45.11	274.89	320
500+	32	195	227		500+	41.53	185.47	227
p= 0.132	384	1,715	2,099			384	1,715	2,099

	ACTUAL					EXPECTED		
	Job Boards	Base				Job Boards	Base	
0	2	30	32		0	4.06	27.94	32
1-9	98	663	761		1-9	96.48	664.52	761
10-49	72	477	549		10-49	69.60	479.40	549
50-99	12	72	84		50-99	10.65	73.35	84
100-499	42	278	320		100-499	40.57	279.43	320
500+	23	195	218		500+	27.64	190.36	218
p= 0.782	249	1,715	1,964			249	1,715	1,964

	ACTUAL					EXPECTED		
	Other	Base				Other	Base	
0	7	30	37		0	4.22	32.78	37
1-9	113	663	776		1-9	88.58	687.42	776
10-49	62	477	539		10-49	61.53	477.47	539
50-99	8	72	80		50-99	9.13	70.87	80
100-499	18	278	296		100-499	33.79	262.21	296
500+	13	195	208		500+	23.74	184.26	208
p= 0.000	221	1,715	1,936			221	1,715	1,936

	ACTUAL					EXPECTED		
	Online Recruiters	Base				Online Recruiters	Base	
0	6	30	36		0	3.84	32.16	36
1-9	78	663	741		1-9	79.12	661.88	741
10-49	69	477	546		10-49	58.30	487.70	546
50-99	9	72	81		50-99	6.50	74.50	81
100-499	26	278	304		100-499	24.38	279.62	304
500+	17	195	212		500+	22.64	189.36	212
p= 0.277	205	1,715	1,920			205	1,715	1,920

	ACTUAL					EXPECTED		
	Job Centers	Base				Job Centers	Base	
0	4	30	34		0	3.39	30.61	34
1-9	75	663	738		1-9	73.61	664.39	738
10-49	41	477	518		10-49	51.66	466.34	518
50-99	6	72	78		50-99	8.55	69.45	78
100-499	40	278	318		100-499	34.85	283.15	318
500+	24	195	219		500+	21.84	197.16	219
p= 0.475	190	1,715	1,905			190	1,715	1,905

	ACTUAL					EXPECTED		
	Job Fairs	Base				Job Fairs	Base	
0	1	30	31		0	2.54	28.46	31
1-9	35	663	698		1-9	57.17	640.83	698
10-49	33	477	510		10-49	41.77	468.23	510
50-99	10	72	82		50-99	6.72	75.28	82
100-499	42	278	320		100-499	26.21	293.79	320
500+	32	195	227		500+	18.59	208.41	227
p= 0.000	153	1,715	1,868			153	1,715	1,868

	ACTUAL					EXPECTED		
	Train Centers	Base				Train Centers	Base	
0	2	30	32		0	2.06	29.94	32
1-9	33	663	696		1-9	44.81	651.19	696
10-49	31	477	508		10-49	32.70	475.30	508
50-99	8	72	80		50-99	7.10	72.90	80
100-499	25	278	303		100-499	26.90	276.10	303
500+	19	195	214		500+	13.78	200.22	214
p= 0.325	118	1,715	1,833			118	1,715	1,833

	ACTUAL					EXPECTED		
	Associations	Base				Associations	Base	
0	3	30	33		0	1.52	31.48	33
1-9	37	663	700		1-9	32.31	667.69	700
10-49	19	477	496		10-49	22.90	473.10	496
50-99	2	72	74		50-99	4.63	69.38	74
100-499	9	278	287		100-499	17.94	269.06	287
500+	13	195	208		500+	9.60	198.40	208
p= 0.062	83	1,715	1,798			83	1,715	1,798

	ACTUAL					EXPECTED		
	Unions	Base				Unions	Base	
0	0	30	30		0	1.03	28.97	30
1-9	10	663	673		1-9	23.12	649.88	673
10-49	10	477	487		10-49	16.73	470.27	487
50-99	1	72	73		50-99	5.21	67.79	73
100-499	25	278	303		100-499	21.64	281.36	303
500+	15	195	210		500+	7.21	202.79	210
p= 0.000	61	1,715	1,776			61	1,715	1,776

	ACTUAL					EXPECTED		
	ANC-Tribal WFDO	Base				ANC-Tribal WFDO	Base	
0	1	30	31		0	0.93	30.07	31
1-9	16	663	679		1-9	20.35	658.65	679
10-49	16	477	493		10-49	14.78	478.22	493
50-99	2	72	74		50-99	3.26	70.74	74
100-499	9	278	287		100-499	12.66	274.34	287
500+	9	195	204		500+	6.12	197.88	204
p= 0.536	53	1,715	1,768			53	1,715	1,768

Chi-Square Tests Methods of Recruitment by Employer Region

	ACTUAL					EXPECTED		
	Social Media	Base				Social Media	Base	
Anchorage	119	541	660		Anchorage	111.90	548.10	660
Gulf Coast	33	112	145		Gulf Coast	24.58	120.42	145
Statewide	118	617	735		Statewide	124.62	610.38	735
Southeast	53	307	360		Southeast	31.30	328.70	360
Interior	46	198	244		Interior	21.22	222.78	244
Northern	6	63	69		Northern	11.70	57.30	69
Southwest	27	131	158		Southwest	26.79	131.21	158
p= 0.000	402	1,969	2,371			402	1,969	2,371

	ACTUAL					EXPECTED		
	Job Boards	Base				Job Boards	Base	
Anchorage	75	541	616		Anchorage	76.45	539.55	616
Gulf Coast	16	112	128		Gulf Coast	15.89	112.11	128
Statewide	76	617	693		Statewide	86.01	606.99	693
Southeast	41	307	348		Southeast	43.19	304.81	348
Interior	34	198	232		Interior	28.79	203.21	232
Northern	12	63	75		Northern	9.31	65.69	75
Southwest	25	131	156		Southwest	19.36	136.64	156
p= 0.000	279	1,969	2,248			279	1,969	2,248

	ACTUAL					EXPECTED		
	Other	Base				Other	Base	
Anchorage	79	541	620		Anchorage	66.61	553.39	620
Gulf Coast	22	112	134		Gulf Coast	14.40	119.60	134
Statewide	43	617	660		Statewide	70.91	589.09	660
Southeast	28	307	335		Southeast	37.75	297.25	335
Interior	37	198	235		Interior	26.48	208.52	235
Northern	8	63	71		Northern	7.63	63.37	71
Southwest	20	131	151		Southwest	16.22	134.78	151
p= 0.000	237	1,969	2,206			237	1,969	2,206

	ACTUAL					EXPECTED		
	Online Recruiters	Base				Online Recruiters	Base	
Anchorage	86	541	627		Anchorage	61.98	565.02	627
Gulf Coast	10	112	122		Gulf Coast	12.06	109.94	122
Statewide	61	617	678		Statewide	67.02	610.98	678
Southeast	20	307	327		Southeast	14.86	312.14	327
Interior	21	198	219		Interior	9.95	209.05	219
Northern	3	63	66		Northern	6.52	59.48	66
Southwest	15	131	146		Southwest	14.43	131.57	146
p= 0.000	216	1,969	2,185			216	1,969	2,185

	ACTUAL					EXPECTED		
	Job Centers	Base				Job Centers	Base	
Anchorage	52	541	593		Anchorage	58.62	534.38	593
Gulf Coast	16	112	128		Gulf Coast	12.65	115.35	128
Statewide	82	617	699		Statewide	69.10	629.90	699
Southeast	22	307	329		Southeast	45.07	283.93	329
Interior	20	198	218		Interior	29.86	188.14	218
Northern	10	63	73		Northern	7.22	65.78	73
Southwest	14	131	145		Southwest	14.33	130.67	145
p= 0.001	216	1,969	2,185			216	1,969	2,185

	ACTUAL					EXPECTED		
	Job Fairs	Base				Job Fairs	Base	
Anchorage	37	541	578		Anchorage	44.44	533.56	578
Gulf Coast	7	112	119		Gulf Coast	9.15	109.85	119
Statewide	76	617	693		Statewide	53.28	639.72	693
Southeast	18	307	325		Southeast	23.90	301.10	325
Interior	9	198	207		Interior	15.22	191.78	207
Northern	5	63	68		Northern	5.23	62.77	68
Southwest	12	131	143		Southwest	10.99	132.01	143
p= 0.000	164	1,969	2,133			164	1,969	2,133

	ACTUAL					EXPECTED		
	Train Centers	Base				Train Centers	Base	
Anchorage	40	541	581	Anchorage	37.28	543.72	581	
Gulf Coast	5	112	117	Gulf Coast	7.51	109.49	117	
Statewide	52	617	669	Statewide	42.93	626.07	669	
Southeast	13	307	320	Southeast	36.06	283.94	320	
Interior	9	198	207	Interior	23.32	183.68	207	
Northern	8	63	71	Northern	4.56	66.44	71	
Southwest	8	131	139	Southwest	8.92	130.08	139	
p= 0.000	135	1,969	2,104		135	1,969	2,104	

	ACTUAL					EXPECTED		
	Associations	Base				Associations	Base	
Anchorage	34	541	575	Anchorage	25.67	549.33	575	
Gulf Coast	1	112	113	Gulf Coast	5.04	107.96	113	
Statewide	36	617	653	Statewide	29.15	623.85	653	
Southeast	6	307	313	Southeast	14.23	298.77	313	
Interior	10	198	208	Interior	9.45	198.55	208	
Northern	3	63	66	Northern	2.95	63.05	66	
Southwest	2	131	133	Southwest	5.94	127.06	133	
p= 0.016	92	1,969	2,061		92	1,969	2,061	

	ACTUAL					EXPECTED		
	Unions	Base				Unions	Base	
Anchorage	14	541	555	Anchorage	17.74	537.26	555	
Gulf Coast	0	112	112	Gulf Coast	3.58	108.42	112	
Statewide	42	617	659	Statewide	21.06	637.94	659	
Southeast	0	307	307	Southeast	13.95	293.05	307	
Interior	6	198	204	Interior	9.27	194.73	204	
Northern	3	63	66	Northern	2.11	63.89	66	
Southwest	0	131	131	Southwest	4.19	126.81	131	
p= 0.000	65	1,969	2,034		65	1,969	2,034	

	ACTUAL					EXPECTED		
	ANC-Tribal WFDO	Base				ANC-Tribal WFDO	Base	
Anchorage	5	541	546		Anchorage	15.62	530.38	546
Gulf Coast	2	112	114		Gulf Coast	3.26	110.74	114
Statewide	31	617	648		Statewide	18.54	629.46	648
Southeast	6	307	313		Southeast	9.63	303.37	313
Interior	6	198	204		Interior	6.28	197.72	204
Northern	2	63	65		Northern	1.86	63.14	65
Southwest	6	131	137		Southwest	3.92	133.08	137
p= 0.004	58	1,969	2,027			58	1,969	2,027

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Alaska’s Workforce Future: Employer Survey

Attachment 4: Barriers to Employment by Employer Size

The table below displays barriers to employment by employer size, based on number of employees and ranked by frequency based on the total. The Chi-square test results for this discussion appear on pp. 4-6.

Table Barriers by Employer Size	1-9	10-49	50-99	100-499	500+	Total
N=	280	161	23	48	31	543
No Qualified Workers	65.4%	71.4%	73.9%	70.8%	71.0%	68.3%
Aging Workforce	26.4%	29.8%	34.8%	47.9%	61.3%	31.7%
Rural Work	23.6%	25.0%	21.7%	41.7%	29.0%	25.8%
Unable to Retain New Hires	19.6%	24.2%	34.8%	50.0%	38.7%	25.4%
Lack of Housing	23.2%	23.1%	39.1%	22.9%	32.3%	24.4%
Competition	15.4%	24.8%	17.4%	41.7%	48.4%	22.5%
Lack of Transportation	17.9%	20.0%	34.8%	31.3%	25.8%	20.8%
Work Demand	16.4%	16.1%	17.4%	33.3%	38.7%	19.2%
Lack of Child/Elder Care	15.0%	23.1%	17.4%	20.8%	32.3%	19.0%
No Local/Regional Training	13.6%	14.4%	8.7%	20.8%	19.4%	14.6%
Cultural Practices	2.9%	4.4%	4.3%	0.0%	6.5%	3.3%

No Qualified Workers is the greatest challenge for all surveyed employers, reported by 68%. The Chi-square analysis on pages 4-6 shows no significant differences based on employer size ($p=0.658$). Employers of all sizes have similar difficulties finding qualified workers. The lack of qualified workers is due in part to the aging workforce. But it is mostly tied to workforce pipeline deficiencies as discussed in Background and elsewhere in this report as well as in the Alaska’s Workforce Future Student Survey report. For example, the Student Survey found 65% of high school respondents report thinking about leaving Alaska; AKDOL data show 50% actually do leave and half of them do not return.

Aging Workforce appears in many current economic headlines. Along with upcoming infrastructure mega projects, the AGING WORKFORCE may be the single most discussed driver of the need for qualified workers. But it may not affect employers of all sizes equally.

AGING WORKFORCE is a significantly greater problem for employers with more than 100 employees ($p=0.000$). Assuming equal probability among the groups, the expectation is 15.2 employers with 100-499 employees would report an aging workforce problem. The actual number is 23. Likewise, for the employers with 500+ employees the equal probability expectation is 9.8 would report an aging workforce problem. The actual number was 19, nearly double the expectation.

		<i>Aging Workforce</i>		
		YES	NO	
1-9	Actual	74	206	280
	Expected	88.69	191.31	
10-49	Actual	48	113	161
	Expected	51.00	110.00	
50-99	Actual	8	15	23
	Expected	7.29	15.71	
100-499	Actual	23	25	48
	Expected	15.20	32.80	
500+	Actual	19	12	31
	Expected	9.82	21.18	
p=0.000		172	371	543

The reasons for this difference may be inherent in what it means to be a larger employer – stable workforce, long-term reliable employees, capacity to employ the better qualified, higher wages and benefits – or to be a

smaller employer – fewer resources, less stability, striving to become a large employer. This is not to say it is not a problem among all sizes of employers with 31% calling it one; it does mean that in thinking about solutions one might consider the greater resources large employers can bring to jump start the primary solution, which is developing a qualified workforce pipeline. Clearly, large employers have more to gain and lose when configuring solutions, especially solutions designed to increase supply of qualified workers.

Rural Work is the third most frequently selected barrier among survey respondents (25.8%). Employer size does not appear to be a factor. It seems RURAL WORK is an approximately equal barrier for all employers regardless of size (p= 0.114) (see Chi-square tests, pp. 4-6). RURAL WORK is revisited in the examination of barriers by region, where RURAL WORK is a more important factor.

Unable to Retain New Hires is a problem experienced by 25% of the employers. However, it is less a problem for employers with 1-9 employees (55 actual responses with 71 expected) and more of a problem for larger employers. Equal probability would suggest 12.2 employers with 100-499 employees in a sample this size would be unable to retain employees, whereas the actual number is more than double that – 24. Likewise, 7.9 employers with more than 500 employees would be expected to experience this issue whereas the actual number is 12.

		Unable to Retain New Hires		
		YES	NO	
1-9	Actual	55	225	280
	Expected	71.16	208.84	
10-49	Actual	39	122	161
	Expected	40.92	120.08	
50-99	Actual	8	15	23
	Expected	5.85	17.15	
100-499	Actual	24	24	48
	Expected	12.20	35.80	
500+	Actual	12	19	
	Expected	7.88	23.12	
p=0.000		138	405	543

Lack of Housing is the next largest barrier for the employers, with 23% naming it. Based solely on an employer’s size, there is no significant difference among the groups (p= 0.385). (see Chi-square tests, pp. 4-6) There is more on this subject in the examination by economic region.

Competition might be imagined to rage among the smaller three categories of employers with 1 to 99 employees. But, in this survey, the greatest perception of competition appears among the larger companies as shown in the table at right. Twenty of the employers with 100 to 499 employees feel competition is a barrier versus 10.8 expected, almost double expectations. Likewise about seven employers with 500+ would have been expected to report competition as a barrier assuming a null hypothesis of no difference between groups, but the actual is 15, more than double expectations.

		Competition		
		YES	NO	
1-9	Actual	43	237	280
	Expected	62.91	217.09	
10-49	Actual	40	121	161
	Expected	36.17	124.83	
50-99	Actual	4	19	23
	Expected	5.17	17.83	
100-499	Actual	20	28	48
	Expected	10.78	37.22	
500+	Actual	15	16	
	Expected	6.97	24.03	
p=0.000		122	421	543

Lack of Transportation is a barrier raised by 20% of the employers. It certainly remains an issue of concern, but organization size does not affect it significantly (p= 0.095). (see Chi-square tests, pp. 4-6) Employers with 50 to 499 employees show some elevated actuals compared to expected. These results are reviewed in the discussion of economic regions.

Work Demand relates to the volume of work undertaken. COMPETITION addresses obtaining work and the resources needed to complete it, while WORK DEMAND addresses the performance of the work. Overall, 19% of the employers saw WORK DEMAND as a barrier. But perception of that demand is not equally distributed ($p = .003$). Once again, it is the larger organizations, with 100 or more employees who seem to be experiencing the highest WORK DEMAND. About 9 employers with 100-499 employees are expected to call WORK DEMAND a barrier.

The actual number is 16. About 6 employers with 500+ employees are expected, where the actual is 12, more than twice the expectation.

In most ways, this makes perfect sense with all the new infrastructure and mega projects planned and starting. These projects will mostly be completed by the larger companies who have the resources to carry them out. And they will have schedules to meet. It is probably reasonable to assume that at the root of the WORK DEMAND issues are the trifecta of NOT ENOUGH QUALIFIED WORKERS, AGING WORKFORCE, and UNABLE TO RETAIN NEW HIRES. Clearly, the larger companies have the resources and the need to act. So enlisting them in building a new workforce development plan is reasonable.

		<i>Work Demand</i>		
		YES	NO	
1-9	Actual	43	237	280
	Expected	62.91	217.09	
10-49	Actual	40	121	161
	Expected	36.17	124.83	
50-99	Actual	4	19	23
	Expected	5.17	17.83	
100-499	Actual	20	28	48
	Expected	10.78	37.22	
500+	Actual	15	16	
	Expected	6.97	24.03	
p=0.003		122	421	543

Lack of Child/Elder Care is reported overall by 19% of the employers. There is not a significant difference based on employer size ($p = 0.079$), but it borders on being an elevated concern for the larger employers in the survey. The null hypothesis of no difference would expect about 6 of the employers with 500+ employees to call LACK OF CHILD/ELDER CARE a barrier. The actual number is 10. (see Chi-square tests, pp. 4-6) This issue is revisited in the examination of barriers by economic region.

This brings the discussion to NO LOCAL/REGIONAL TRAINING (14%) and CULTURAL PRACTICES (4%). These barriers do not differ in significance based on employer size. Both are discussed in the examination of barriers by economic region.

See Chi-square tests on pages 4-6

Barriers by Employer Size: Chi-Square Tests

The Chi-square test for each barrier by employer size is presented below. The tests measure differences among

employer size categories based on comparison of the actual counts of responses with the expected.

Employer size

is based on number of employees.

Actual				Expected			
No Qualified Workers				No Qualified Workers			
	Yes	No		Yes	No		
1-9	183	97	280	191.31	88.69	280	
10-49	115	46	161	110.00	51.00	161	
50-99	17	6	23	15.71	7.29	23	
100-499	34	14	48	32.80	15.20	48	
500+	22	9	31	21.18	9.82	31	
p=0.658	371	172	543	371	172	543	

Actual				Expected			
Aging Workforce				Aging Workforce			
	Yes	No		Yes	No		
1-9	74	206	280	88.69	191.31	280	
10-49	48	113	161	51.00	110.00	161	
50-99	8	15	23	7.29	15.71	23	
100-499	23	25	48	15.20	32.80	48	
500+	19	12	31	9.82	21.18	31	
p=0.000	172	371	543	172	371	543	

Actual				Expected			
Rural Work				Rural Work			
	Yes	No		Yes	No		
1-9	66	214	280	72.32	207.68	280	
10-49	40	120	160	41.33	118.67	160	
50-99	5	18	23	5.94	17.06	23	
100-499	20	28	48	12.40	35.60	48	
500+	9	22	31	8.01	22.99	31	
p=0.1138	140	402	542	140	402	542	

Actual				Expected			
<i>Unable To Retain New Hirers</i>				<i>Unable To Retain New Hirers</i>			
	Yes	No		Yes	No		
1-9	55	225	280	71.16	208.84	280	
10-49	39	122	161	40.92	120.08	161	
50-99	8	15	23	5.85	17.15	23	
100-499	24	24	48	12.20	35.80	48	
500+	12	19	31	7.88	23.12	31	
p=0.0001	138	405	543	138	405	543	

Actual				Expected			
<i>Lack of Housing</i>				<i>Lack of Housing</i>			
	Yes	No		Yes	No		
1-9	65	215	280	68.19	211.81	280	
10-49	37	123	160	38.97	121.03	160	
50-99	9	14	23	5.60	17.40	23	
100-499	11	37	48	11.69	36.31	48	
500+	10	21	31	7.55	23.45	31	
p=0.3848	132	410	542	132	410	542	

Actual				Expected			
<i>Competition</i>				<i>Competition</i>			
	Yes	No		Yes	No		
1-9	43	237	280	62.91	217.09	280	
10-49	40	121	161	36.17	124.83	161	
50-99	4	19	23	5.17	17.83	23	
100-499	20	28	48	10.78	37.22	48	
500+	15	16	31	6.97	24.03	31	
p=0.0000	122	421	543	122	421	543	

Actual <i>Lack of Child/Elder Care</i>				Expected <i>Lack of Child/Elder Care</i>			
	Yes	No		Yes	No		
1-9	42	238	280	53.71	226.29	280	
10-49	37	123	160	30.69	129.31	160	
50-99	4	14	18	3.45	14.55	18	
100-499	10	38	48	9.21	38.79	48	
500+	10	21	31	5.95	25.05	31	
p=0.0788	103	434	537	103	434	537	

Actual <i>No Local/Regional Training</i>				Expected <i>No Local/Regional Training</i>			
	Yes	No		Yes	No		
1-9	38	242	280	40.81	239.19	280	
10-49	23	137	160	23.32	136.68	160	
50-99	2	21	23	3.35	19.65	23	
100-499	10	38	48	7.00	41.00	48	
500+	6	25	31	4.52	26.48	31	
p=0.5664	79	463	542	79	463	542	

Actual <i>Cultural Practices</i>				Expected <i>Cultural Practices</i>			
	Yes	No		Yes	No		
1-9	8	272	280	9.30	270.70	280	
10-49	7	153	160	5.31	154.69	160	
50-99	1	22	23	0.76	22.24	23	
100-499	0	48	48	1.59	46.41	48	
500+	2	29	31	1.03	29.97	31	
p=0.4914	18	524	542	18	524	542	

Alaska's Workforce Future: Employer Survey

Attachment 5: Barriers to Employment by Employer Region

The table displays barriers reported by employer region, the region(s) in which employer operates. The barriers are ranked by frequency based on the total in column right. Because some employers work in more than one region, the total N is greater than the number of respondents. The Chi-square test results for this discussion appear on pp. 5-7.

Employer Region	Anch/ Mat-Su	Gulf Coast	State wide	South east	Interior	Northern	South west	TOTAL
N=	202	46	142	82	62	17	49	600
No Qualified Workers	67.8%	67.4%	68.3%	72.0%	74.2%	70.6%	65.3%	66.6%
Aging Workforce	24.3%	41.3%	40.1%	31.7%	30.6%	41.2%	28.6%	30.8%
Unable to Retain New Hires	24.3%	21.7%	30.3%	26.8%	24.2%	41.2%	28.6%	25.1%
Rural Work	7.4%	41.3%	29.1%	37.8%	37.1%	52.9%	53.1%	25.0%
Lack of Housing	11.9%	32.6%	17.7%	53.7%	17.7%	11.8%	34.7%	23.4%
Competition	20.8%	19.6%	30.3%	14.6%	22.6%	52.9%	24.5%	21.7%
Lack of Transportation	19.8%	15.2%	24.8%	15.9%	16.1%	29.4%	26.5%	20.1%
Lack of Child/Elder Care	13.4%	10.9%	20.6%	30.5%	22.6%	17.6%	20.4%	18.6%
Work Demand	19.3%	8.7%	23.9%	13.4%	29.0%	35.3%	16.3%	18.4%
No Local/Regional Training	11.9%	19.6%	12.8%	24.4%	11.3%	17.6%	34.7%	13.7%
Cultural Practices	1.5%	2.2%	5.0%	2.4%	6.5%	0.0%	4.1%	3.1%

As seen in Barriers by Employer Size, the first and second ranked barriers to employment by region are also NO QUALIFIED WORKERS (66.6%) and AGING WORKFORCE (30%) across nearly all regions. UNABLE TO RETAIN NEW HIRES (25%) and RURAL WORK (25%) are both third in this examination.

No Qualified Workers is the greatest challenge for all surveyed employers, in all regions, as reported by 67% of respondents. More than two-thirds have difficulties finding qualified workers. The analysis by economic region shows significant differences from what would be expected based on a null hypothesis of no difference between regions ($p=0.000$), as seen at right. (The Chi-square based on employer size showed no significant differences among employer sizes.)

LACK OF QUALIFIED WORKERS is significantly more prevalent than expected in Anchorage/Mat-Su (101.6 expected, 137 actual), Southeast (15 expected, 22 actual), Interior (31 expected, 46 actual), Northern (8.5 expected 12 actual), and Southwest (24.6 expected, 32 actual) regions.

Employers of all sizes have similar difficulties finding qualified workers, but the difficulty is greater in some regions than in others.

		YES	NO	
Anch/Mat-Su	Actual	137	65	202
	Expected	101.67	100.33	
Gulf Coast	Actual	10	36	46
	Expected	23.15	22.85	
Statewide	Actual	43	99	142
	Expected	71.47	70.53	
Southeast	Actual	22	60	82
	Expected	15.20	32.80	
Interior	Actual	46	16	62
	Expected	31.21	30.79	
Northern	Actual	12	5	17
	Expected	8.56	8.44	
Southwest	Actual	32	17	49
	Expected	24.66	24.34	
p=0.000		302	298	600

One hypothesis is that an AGING WORKFORCE plays a key role in those regions where there is more difficulty finding qualified workers. But, as shown below, AGING WORKFORCE is not more prevalent in those regions. Other factors likely have more impact. The difficulty finding workers is more likely a training/education and recruitment issue, as discussed in the Alaska’s Workforce Future Student Survey report.

Aging Workforce is a well-known current issue. Along with mounting demands of mega infrastructure projects, it may be the single most discussed driver in the need for a new workforce plan with strong training/education and recruit components. It may not affect all regions equally.

In the analysis of AGING WORKFORCE by employer size (Attachment 4), it is a significantly larger problem for employers with 100 to 500+ employees (p= 0.000).

In this analysis by economic region, only the Northern region shows significant elevations for AGING WORKFORCE and NO QUALIFIED WORKERS. Statistical significance is barely achieved (p= 0.048), with the exceptions of statewide (expected 45 and actual 57), Gulf Coast (expected 14.6 and actual 19), and Northern (expect 5.4 and actual 7). So it is unlikely the higher levels of NO QUALIFIED WORKERS in some regions can be attributed to AGING WORKFORCE.

		<i>Aging Workforce</i>		
		YES	NO	
Anch/Mat-Su	Actual	49	153	202
	Expected	64.30	137.70	
Gulf Coast	Actual	19	27	46
	Expected	14.64	31.36	
Statewide	Actual	57	85	142
	Expected	45.20	96.80	
Southeast	Actual	26	56	82
	Expected	26.10	55.90	
Interior	Actual	19	43	62
	Expected	19.74	42.26	
Northern	Actual	7	10	17
	Expected	5.41	11.59	
Southwest	Actual	14	35	49
	Expected	15.60	33.40	
p=0.048		191	409	600

Unable to Retain New Hires is a barrier identified by 25% of responding employers. In Barriers by Employer Size, a significant difference is seen between the smaller employers with less difficulty and the larger employers with more difficulty (p= 0.000). However, this comparison by economic region yields no significant differences (p= 0.645), suggesting the difficulty should be addressed as an employer size issue. (see Chi-square tests, pp. 5-7)

Rural Work is the third ranked barrier, along with UNABLE TO RETAIN NEW HIRES. Significant differences exist among the regions (p= 0.000). As presumed, the Anchorage/ Mat-Su employers do not identify RURAL WORK as barrier. But for all other regions the actual counts exceed the expected (p-0.0000).

RURAL WORK will always be a barrier to employment, unless better efforts are made to upskill the rural workforce so that outside workers are not needed. This also requires expanding housing, transportation, and training and education opportunities in rural communities, which requires a policy commitment. As a first step, the Alaska’s Workforce Future Plan recommends creating Regional Workforce Development Teams (RWDTs) and establishing MOU with AWIB to address the specific issues of each region.

		<i>Rural Work</i>		
		YES	NO	
Anch/Mat-Su	Actual	15	187	202
	Expected	55.31	146.69	
Gulf Coast	Actual	19	27	46
	Expected	12.59	33.41	
Statewide	Actual	41	100	141
	Expected	38.60	102.40	
Southeast	Actual	31	51	82
	Expected	22.45	59.55	
Interior	Actual	23	39	62
	Expected	16.97	45.03	
Northern	Actual	9	8	17
	Expected	4.65	12.35	
Southwest	Actual	26	23	49
	Expected	13.42	35.58	
p=0.000		164	435	599

Lack of Housing is identified as a barrier by 23% of respondents. Like RURAL WORK, LACK OF HOUSING is an economic region barrier. Employers in the Anchorage/Mats-Su region are significantly less likely to identify LACK OF HOUSING as a barrier (55 expected, 15 actual), while all the other economic regions exceed the expected normal probability by 1.2 to 1.9 times ($p=0.000$).

LACK OF HOUSING is closely tied to rural living and RURAL WORK. Developing plans to deliver housing in rural Alaska is a necessary precondition to mitigating the workforce crisis in these regions. (see Chi-square tests, pp. 5-7)

		<i>Lack of Housing</i>		
		YES	NO	
Anch/Mat-Su	Actual	15	187	202
	Expected	55.31	146.69	
Gulf Coast	Actual	19	27	46
	Expected	12.59	33.41	
Statewide	Actual	41	100	141
	Expected	38.60	102.40	
Southeast	Actual	31	51	82
	Expected	22.45	59.55	
Interior	Actual	23	39	62
	Expected	16.97	45.03	
Northern	Actual	9	8	17
	Expected	4.65	12.35	
Southwest	Actual	26	23	49
	Expected	13.42	35.58	
p=0.000		164	435	599

Competition is a significant barrier for employers based on size, as seen in Barriers by Employer Size. As shown at right, based on economic region, Anchorage/Mat-Su and Southeast employers experience less COMPETITION than expected while statewide and Northern experience more than expected. Gulf Coast, Interior, and Southwest employers reported competition that was what would be expected based on the null hypothesis of no difference. Employers competing statewide might expect competition wherever the projects are. But why the Northern region actual count is double the expected is unclear.

		<i>Competition</i>		
		YES	NO	
Anch/Mat-Su	Actual	42	160	202
	Expected	55.31	146.69	
Gulf Coast	Actual	9	37	46
	Expected	10.81	35.19	
Statewide	Actual	43	99	142
	Expected	33.37	108.63	
Southeast	Actual	12	70	82
	Expected	19.27	62.73	
Interior	Actual	14	48	62
	Expected	14.57	47.43	
Northern	Actual	9	8	17
	Expected	4.00	13.01	
Southwest	Actual	12	37	49
	Expected	11.52	37.49	
p=0.012		141	459	600

Lack of Transportation is a barrier selected by 20% of the employers. The actual counts for employers with 50 to 499 employees are only somewhat elevated compared with the expected. It also appears that LACK OF TRANSPORTATION is not a greater barrier for employers based on region of operation ($p=0.402$). This does not mean that many employers do not see transportation needs as a barrier. It means LACK OF TRANSPORTATION impacts all employers regardless of size or the regions in which they work. (see Chi-square tests, pp. 5-7)

Lack of Child/Elder Care is a barrier identified by 19% of all the employers. As discussed earlier, there is no significant difference based on employer size ($p=0.079$). Given the frequent mentions of child and elder care in Alaska's Workforce Future discussions, we had expected elevations among some economic regions. What we see is elevated reporting in the Southeast (15.5 expected 25 actual) and Interior regions (27 expected 14 actual) along with lower reporting in Anchorage/Mat-Su (38 expected 27 actual) ($p=0.029$). LACK OF CHILD/ELDER CARE is a real barrier, but survey findings provide little insight into *where* an effort is needed. It may be an issue by industry and should be evaluated by the proposed Regional Workforce Development Teams (RWDTs).

Work Demand reflects the volume of work undertaken by an employer. As COMPETITION addresses obtaining work and the resources to complete it, WORK DEMAND addresses the performance of the work.

Overall, 19% of the employers identify WORK DEMAND as a barrier. As seen earlier, the WORK DEMAND barrier is not equally distributed by employer size ($p = .003$). The larger organizations, with 100 or more employees experienced the highest WORK DEMAND. This examination of WORK DEMAND by economic region reveals some regions with WORK DEMAND less than or equal to what is expected: Anchorage/Mat-Su (40.4 expected, actual 39), Gulf Coast (9.2 expected, 4 actual), Southeast (16.4 expected, actual 11), and Southwest (9.8 expected, 8 actual). Employers in three regions report significantly higher than expected WORK DEMAND: Statewide (28.4 expected, actual 34), Interior (12.4 expected, actual 18), and Northern (3.4 expected, 6 actual). The differences are significant ($p = 0.037$). Statewide was expected to have greater WORK DEMAND than the regions. What is not understood is why Interior and Northern are elevated. In the results thus far, Northern has shown greater than expected reports for several of the barriers to employment. This may suggest that some conditions in the Northern Region could be used as pilot test ground for interventions, or it may reflect undersampling in the survey.

		Work Demand		
		YES	NO	
Anch/Mat-Su	Actual	39	163	202
	Expected	40.40	161.60	
Gulf Coast	Actual	4	42	46
	Expected	9.20	36.80	
Statewide	Actual	34	108	142
	Expected	28.40	113.60	
Southeast	Actual	11	71	82
	Expected	16.40	65.60	
Interior	Actual	18	44	62
	Expected	12.40	49.60	
Northern	Actual	6	11	17
	Expected	3.40	13.60	
Southwest	Actual	8	41	49
	Expected	9.80	39.20	
p=0.037		120	480	600

No Local/Regional Training is viewed as a barrier by about 13% of survey respondents. In the examination based on employer size, there is no significant difference. As expected, that is not the case in this economic region perspective. For years, advocates have worked to establish regional training centers to skill and upskill workers for local and regional employment. There have been some successes, but in recent years use and operation has experienced “back sliding.” In this economic region analysis of the training barrier, we see employers in the Gulf Coast (expected 7.5 actual 9), Southeast (13.4 expected actual 20), and Southwest region (expected 8.0 actual 17) reporting a greater than expected need for developing such training ($p = 0.001$). These results suggest that working with local employers in these regions could create or revive local training centers that could benefit these regions.

		No Local/Regional Training		
		YES	NO	
Anch/Mat-Su	Actual	24	178	202
	Expected	33.05	168.95	
Gulf Coast	Actual	9	37	46
	Expected	7.53	38.47	
Statewide	Actual	18	123	141
	Expected	23.07	117.93	
Southeast	Actual	20	62	82
	Expected	13.42	68.58	
Interior	Actual	7	55	62
	Expected	10.14	51.86	
Northern	Actual	3	14	17
	Expected	2.78	14.22	
Southwest	Actual	17	32	49
	Expected	8.02	40.98	
p =0.001		120	480	599

Cultural Practices are the lowest ranked barrier to employer. There is no significant difference seen in the analyses by size or by economic region. This is not to say this is not an issue with some employers, 3% overall, but CULTURAL PRACTICES represent the least relevant barrier for the employers responding in this survey. (see Chi-square tests, pp. 5-7)

Barriers by Employer Region: Chi-Square Tests

The Chi-square test for each barrier by employer region is presented below. The tests measure differences among employer regions based on comparison of the actual counts of responses with the expected. Some totals may exceed total respondents because some employers operate in more than one region.

Actual				Expected			
<i>No Qualified Workers</i>				<i>No Qualified Workers</i>			
	Yes	No		Yes	No		
Anchor/Mat-Su	137	65	202	Anchor/Matsu	101.67	100.33	202
Gulf Coast	10	36	46	Gulf Coast	23.15	22.85	46
Statewide	43	99	142	Statewide	71.47	70.53	142
Southeast	22	60	82	Southeast	41.27	40.73	82
Interior	46	16	62	Interior	31.21	30.79	62
Northern	12	5	17	Northern	8.56	8.44	17
Southwest	32	17	49	Southwest	24.66	24.34	49
p=0.0000	302	298	600	302	298	600	

Actual				Expected			
<i>Aging Workforce</i>				<i>Aging Workforce</i>			
	Yes	No		Yes	No		
Anchor/Mat-Su	49	153	202	Anchor/Mat-Su	64.30	137.70	202
Gulf Coast	19	27	46	Gulf Coast	14.64	31.36	46
Statewide	57	85	142	Statewide	45.20	96.80	142
Southeast	26	56	82	Southeast	26.10	55.90	82
Interior	19	43	62	Interior	19.74	42.26	62
Northern	7	10	17	Northern	5.41	11.59	17
Southwest	14	35	49	Southwest	15.60	33.40	49
p=0.0476	191	409	600	191	409	600	

Actual				Expected			
<i>Unable to Retain New Hirers</i>				<i>Unable to Retain New Hirers</i>			
	Yes	No		Yes	No		
Anchor/Mat-Su	49	153	202	Anchor/Mat-Su	53.87	148.13	202
Gulf Coast	10	36	46	Gulf Coast	12.27	33.73	46
Statewide	43	99	142	Statewide	37.87	104.13	142
Southeast	22	60	82	Southeast	21.87	60.13	82
Interior	15	47	62	Interior	16.53	45.47	62
Northern	7	10	17	Northern	4.53	12.47	17
Southwest	14	35	49	Southwest	13.07	35.93	49
p=0.6448	160	440	600	160	440	600	

Actual <i>Rural Work</i>				Expected <i>Rural Work</i>			
	Yes	No		Yes	No		
Anchorage/Mat-Su	15	187	202	Anchor/Mat-Su	55.31	146.69	202
Gulf Coast	19	27	46	Gulf Coast	12.59	33.41	46
Statewide	41	100	141	Statewide	38.60	102.40	141
Southeast	31	51	82	Southeast	22.45	59.55	82
Interior	23	39	62	Interior	16.97	45.03	62
Northern	9	8	17	Northern	4.65	12.35	17
Southwest	26	23	49	Southwest	13.42	35.58	49
p=0.0000	164	435	599		164	435	599

Actual <i>Lack of Housing</i>				Expected <i>Lack of Housing</i>			
	Yes	No		Yes	No		
Anchor/Mat-Su	24	178	202	Anchor/Mat-Su	46.54	155.46	202
Gulf Coast	15	31	46	Gulf Coast	10.60	35.40	46
Statewide	25	116	141	Statewide	32.48	108.52	141
Southeast	44	38	82	Southeast	18.89	63.11	82
Interior	11	51	62	Interior	14.28	47.72	62
Northern	2	15	17	Northern	3.92	13.08	17
Southwest	17	32	49	Southwest	11.29	37.71	49
p=0.0000	138	461	599		138	461	599

Actual <i>Competition</i>				Expected <i>Competition</i>			
	Yes	No		Yes	No		
Anchorage/Mat-Su	42	160	202	Anchorage/Mat-Su	47.47	154.53	202
Gulf Coast	9	37	46	Gulf Coast	10.81	35.19	46
Statewide	43	99	142	Statewide	33.37	108.63	142
Southeast	12	70	82	Southeast	19.27	62.73	82
Interior	14	48	62	Interior	14.57	47.43	62
Northern	9	8	17	Northern	4.00	13.01	17
Southwest	12	37	49	Southwest	11.52	37.49	49
p=0.0105	141	459	600		141	459	600

Actual				Expected			
<i>Lack of Transportation</i>				<i>Lack of Transportation</i>			
	Yes	No		Yes	No		
Anchorage/Mat-Su	40	162	202	41.48	160.52	202	
Gulf Coast	7	39	46	9.45	36.55	46	
Statewide	35	106	141	28.95	112.05	141	
Southeast	13	69	82	16.84	65.16	82	
Interior	10	52	62	12.73	49.27	62	
Northern	5	12	17	3.49	13.51	17	
Southwest	13	36	49	10.06	38.94	49	
p=0.4021	123	476	599	123	476	599	

Actual				Expected			
<i>Lack of Child/Elder Care</i>				<i>Lack of Child/Elder Care</i>			
	Yes	No		Yes	No		
Anchorage/Mat-Su	27	175	202	38.11	163.89	202	
Gulf Coast	5	41	46	8.68	37.32	46	
Statewide	29	112	141	26.60	114.40	141	
Southeast	25	57	82	15.47	66.53	82	
Interior	14	48	62	11.70	50.30	62	
Northern	3	14	17	3.21	13.79	17	
Southwest	10	39	49	9.24	39.76	49	
p=0.0289	113	486	599	113	486	599	

Actual				Expected			
<i>Work Demand</i>				<i>Work Demand</i>			
	Yes	No		Yes	No		
Anchorage/Mat-Su	39	163	202	40.40	161.60	202	
Gulf Coast	4	42	46	9.20	36.80	46	
Statewide	34	108	142	28.40	113.60	142	
Southeast	11	71	82	16.40	65.60	82	
Interior	18	44	62	12.40	49.60	62	
Northern	6	11	17	3.40	13.60	17	
Southwest	8	41	49	9.80	39.20	49	
p=0.0371	120	480	600	120	480	600	

Actual				Expected			
<i>No Local/Regional Training</i>				<i>No Local/Regional Training</i>			
	Yes	No		Yes	No		
Anchorage/Mat-Su	24	178	202	33.05	168.95	202	
Gulf Coast	9	37	46	7.53	38.47	46	
Statewide	18	123	141	23.07	117.93	141	
Southeast	20	62	82	13.42	68.58	82	
Interior	7	55	62	10.14	51.86	62	
Northern	3	14	17	2.78	14.22	17	
Southwest	17	32	49	8.02	40.98	49	
p=0.0014	98	501	599	98	501	599	


Actual				Expected			
<i>Cultural Practices</i>				<i>Cultural Practices</i>			
	Yes	No			Yes	No	
Anchorage/Mat-Su	3	199	202	Anchorage/Mat-Su	6.41	195.59	202
Gulf Coast	1	45	46	Gulf Coast	1.46	44.54	46
Statewide	7	134	141	Statewide	4.47	136.53	141
Southeast	2	80	82	Southeast	2.60	79.40	82
Interior	4	58	62	Interior	1.97	60.03	62
Northern	0	17	17	Northern	0.54	16.46	17
Southwest	2	47	49	Southwest	1.55	47.45	49
p=0.3696	19	580	599		19	580	599

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Alaska's Workforce Future: Employer Survey

Attachment 7: Sample Email Message to Employers April 2024 (3rd Traunch)

Alaska Needs Your Help


 From Alaska Workforce 2030
to fof@ix.netcom.com

Wed 4/24/2024 3:06 PM

 Unsubscribe from receiving these messages.

Alaska Workforce 2030: Employer Survey

One last chance to share your experience and opinions!
If you have already responded, thank you and please ignore this message.



Alaska needs your help! Critical labor shortages now impact every industry and community in our state. Your experience will help solve Alaska's labor shortages and build our state's cross-industry strategy to address labor needs.

Please make sure FOF Communications participates in the Alaska Workforce 2030 Employer Survey.

The 20-minute survey should be completed by the executive, human resources manager, business owner, and/or other individual who knows the employment policies and jobs. If you are not that person, please forward the survey to the correct individual. If you represent an educational or training entity, please answer the survey questions from the perspective of an employer. Thank you for your time.

SEE THE STATE'S PRESS RELEASE:
[Workforce 2030 Press Release](#)

SEE THE WORKFORCE 2030 WEBSITE:
alaskaworkforce.org

Take The Survey

Workforce 2030 The Alaska Plan is supported by the Denali Commission, the State of Alaska Department of Labor and Workforce Development, the Alaska Workforce Investment Board, and the Alaska Department of Education and Early Development. The Alaska Safety Alliance (ASA) leads the planning.

Alaska Workforce 2030
2600 Cordova Street 99503, Workforce 2030, Anchorage, AK 99503
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Alaska's Workforce Future: Employer Survey

Attachment 8: Brief Synopsis of Research on Online Recruiting Methods

For all survey respondents, online recruiting methods dominate regardless of size or region. These methods have taken over the role previously served by State job centers and schools and training centers. In part, this is due to job centers and schools and training centers having fewer resources and therefore being less useful. It is also driven by the growth of the internet. However, many researchers now report that online for-profit methods have eviscerated more traditional methods of recruiting and hiring to the detriment of employers and employees and that it is time to revitalize more targeted employer-employee connections to rebuild the talent pipeline and rethink and/or expand the missions of State resources like job centers.

Many U.S. companies – about 40%, according to research by Korn Ferry – have outsourced much if not all of the hiring process to commercial "recruitment process outsourcers," which in turn often use subcontractors, typically in India and the Philippines. The subcontractors scour "LinkedIn" and other social media to find potential candidates. (Harvard Business Review, *Hiring and Recruitment Your Approach to Hiring Is All Wrong*, Peter Cappelli, May- June 2019 [LINK](#)). Further, only about a third of U.S. companies report that they monitor whether their recruiting practices lead to good employees; few of them do so carefully, and only a minority even track cost per hire and time to hire.

Several researchers now conclude the dominant reliance by employers on for-profit online recruitment has upended labor market hiring practices, harms recruitment efforts, and causes potential employee demoralization. A review of the employer comments from this survey spotlights this effect, as employers candidly describe their inability to recruit, hire, and retain employees. It is also demoralizing for potential employees, due to low callback rates and lack of employer contact. Left with no options but to submit more applications into the void, they feel they face an uncertain future¹. In our Alaska's Workforce Future Student Survey, this uncertainty is associated with "thoughts of leaving Alaska."

As pointed out by one researcher, these commercial online platforms are often "designed for employers to initiate contact."¹ Several recent algorithm audit studies also suggest the data-driven technologies adopted in the hiring process may further disadvantage marginalized job seekers based on criteria like gender ([LINK](#)), race and ethnicity ([LINK](#)), and more, including lack of access to internet services.

Many have written about discriminatory practices that take place on social media, often leading to illegal exclusion of applicants ([LINK](#)). With for-profit job boards, the problem is often quantity over quality ([LINK](#)). In both instances both employees and employers may end up frustrated and underserved.

Overall, several studies find the asymmetry of power between institutions and job seekers with limited access to social connections challenges their ability to find employment while leaving many employers frustrated with their employee choices, not to mention the costs associated with for-profit job boards and online recruiters. For many smaller companies, transactional recruitment prices them out of the market for the best employees and in many cases for any employee. The employee resource pool for these employers becomes very restricted, while access to a broader pool of potential employees is reduced.

If the employers received fair value for their expenditures, the process might be beneficial. But this transactional, disconnected and isolated recruiting system's dominance actually makes for-profit social media companies, job board providers, and online recruiters the primary beneficiaries. Employers typically

must spend considerable amounts on hiring – an average of \$4,129 per job in the United States, according to Society for Human Resource Management estimates, and many times that amount for managerial roles. It may be a good time for a new strategy.

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1. Kristin S Seefeldt. 2016. *Abandoned families: Social isolation in the twenty-first century*. Russell Sage Foundation, New York, NY.
 2. Indrė Žliobaitė and Bart Custers. 2016. Artificial Intelligence and Law. Using sensitive personal data may be necessary for avoiding discrimination in data-driven decision models. *24, 2* (2016), 183–201.

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