Alaska's Workforce Future: Employer Survey

Attachments 1-5

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

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**

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

		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

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.

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.

Work Demand

		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

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.

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: No Qualified Workers	Yes	No	
1-9	183	97	280
10-49	115	46	161
50-99	17	6	23
100-499	34	14	48
500+	22	9	31
p=0.658	**371**	**172**	543

Expected: No Qualified Workers	Yes	No	
1-9	191.31	88.69	280
10-49	110.00	51.00	161
50-99	15.71	7.29	23
100-499	32.80	15.20	48
500+	21.18	9.82	31
	371	**172**	543

Actual: Aging Workforce	Yes	No	
1-9	74	206	280
10-49	48	113	161
50-99	8	15	23
100-499	23	25	48
500+	19	12	31
p=0.000	**172**	**371**	543

Expected: Aging Workforce	Yes	No	
1-9	88.69	191.31	280
10-49	51.00	110.00	161
50-99	7.29	15.71	23
100-499	15.20	32.80	48
500+	9.82	21.18	31
	172	**371**	543

Actual: Rural Work	Yes	No	
1-9	66	214	280
10-49	40	120	160
50-99	5	18	23
100-499	20	28	48
500+	9	22	31
p=0.1138	**140**	**402**	542

Expected: Rural Work	Yes	No	
1-9	72.32	207.68	280
10-49	41.33	118.67	160
50-99	5.94	17.06	23
100-499	12.40	35.60	48
500+	8.01	22.99	31
	140	**402**	542

Actual *Unable To Retain New Hirers*			
	Yes	No	
1-9	55	225	280
10-49	39	122	161
50-99	8	15	23
100-499	24	24	48
500+	12	19	31
p=0.0001	**138**	**405**	543

Expected *Unable To Retain New Hirers*			
	Yes	No	
1-9	71.16	208.84	280
10-49	40.92	120.08	161
50-99	5.85	17.15	23
100-499	12.20	35.80	48
500+	7.88	23.12	31
	138	**405**	543

Actual *Lack of Housing*			
	Yes	No	
1-9	65	215	280
10-49	37	123	160
50-99	9	14	23
100-499	11	37	48
500+	10	21	31
p=0.3848	**132**	**410**	542

Expected *Lack of Housing*			
	Yes	No	
1-9	68.19	211.81	280
10-49	38.97	121.03	160
50-99	5.60	17.40	23
100-499	11.69	36.31	48
500+	7.55	23.45	31
	132	**410**	542

Actual *Competition*			
	Yes	No	
1-9	43	237	280
10-49	40	121	161
50-99	4	19	23
100-499	20	28	48
500+	15	16	31
p=0.0000	**122**	**421**	543

Expected *Competition*			
	Yes	No	
1-9	62.91	217.09	280
10-49	36.17	124.83	161
50-99	5.17	17.83	23
100-499	10.78	37.22	48
500+	6.97	24.03	31
	122	**421**	543

	Actual *Lack of Child/Elder Care*		
	Yes	No	
1-9	42	238	280
10-49	37	123	160
50-99	4	14	18
100-499	10	38	48
500+	10	21	31
p=0.0788	**103**	**434**	537

	Expected *Lack of Child/Elder Care*		
	Yes	No	
1-9	53.71	226.29	280
10-49	30.69	129.31	160
50-99	3.45	14.55	18
100-499	9.21	38.79	48
500+	5.95	25.05	31
	103	**434**	537

	Actual *No Local/Regional Training*		
	Yes	No	
1-9	38	242	280
10-49	23	137	160
50-99	2	21	23
100-499	10	38	48
500+	6	25	31
p=0.5664	**79**	**463**	542

	Expected *No Local/Regional Training*		
	Yes	No	
1-9	40.81	239.19	280
10-49	23.32	136.68	160
50-99	3.35	19.65	23
100-499	7.00	41.00	48
500+	4.52	26.48	31
	79	**463**	542

	Actual *Cultural Practices*		
	Yes	No	
1-9	8	272	280
10-49	7	153	160
50-99	1	22	23
100-499	0	48	48
500+	2	29	31
p=0.4914	**18**	**524**	542

	Expected *Cultural Practices*		
	Yes	No	
1-9	9.30	270.70	280
10-49	5.31	154.69	160
50-99	0.76	22.24	23
100-499	1.59	46.41	48
500+	1.03	29.97	31
	18	**524**	542

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.

Table X: Barriers by 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.

No Qualified Workers

		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.

Aging Workforce

		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.

Rural Work

		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)

Lack of Housing

		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.

Competition

		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.

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

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.

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 — *No Qualified Workers*

	Yes	No	
Anchor/Mat-Su	137	65	202
Gulf Coast	10	36	46
Statewide	43	99	142
Southeast	22	60	82
Interior	46	16	62
Northern	12	5	17
Southwest	32	17	49
p=0.0000	**302**	**298**	600

Expected — *No Qualified Workers*

	Yes	No	
Anchor/Matsu	101.67	100.33	202
Gulf Coast	23.15	22.85	46
Statewide	71.47	70.53	142
Southeast	41.27	40.73	82
Interior	31.21	30.79	62
Northern	8.56	8.44	17
Southwest	24.66	24.34	49
	302	**298**	600

Actual — *Aging Workforce*

	Yes	No	
Anchor/Mat-Su	49	153	202
Gulf Coast	19	27	46
Statewide	57	85	142
Southeast	26	56	82
Interior	19	43	62
Northern	7	10	17
Southwest	14	35	49
p=0.0476	**191**	**409**	600

Expected — *Aging Workforce*

	Yes	No	
Anchor/Mat-Su	64.30	137.70	202
Gulf Coast	14.64	31.36	46
Statewide	45.20	96.80	142
Southeast	26.10	55.90	82
Interior	19.74	42.26	62
Northern	5.41	11.59	17
Southwest	15.60	33.40	49
	191	**409**	600

Actual — *Unable to Retain New Hirers*

	Yes	No	
Anchor/Mat-Su	49	153	202
Gulf Coast	10	36	46
Statewide	43	99	142
Southeast	22	60	82
Interior	15	47	62
Northern	7	10	17
Southwest	14	35	49
p=0.6448	**160**	**440**	600

Expected — *Unable to Retain New Hirers*

	Yes	No	
Anchor/Mat-Su	53.87	148.13	202
Gulf Coast	12.27	33.73	46
Statewide	37.87	104.13	142
Southeast	21.87	60.13	82
Interior	16.53	45.47	62
Northern	4.53	12.47	17
Southwest	13.07	35.93	49
	160	**440**	600

Actual *Rural Work*	Yes	No	
Anchorage/Mat-Su	15	187	202
Gulf Coast	19	27	46
Statewide	41	100	141
Southeast	31	51	82
Interior	23	39	62
Northern	9	8	17
Southwest	26	23	49
p=0.0000	**164**	**435**	599

Expected *Rural Work*	Yes	No	
Anchor/Mat-Su	55.31	146.69	202
Gulf Coast	12.59	33.41	46
Statewide	38.60	102.40	141
Southeast	22.45	59.55	82
Interior	16.97	45.03	62
Northern	4.65	12.35	17
Southwest	13.42	35.58	49
	164	**435**	599

Actual *Lack of Housing*	Yes	No	
Anchor/Mat-Su	24	178	202
Gulf Coast	15	31	46
Statewide	25	116	141
Southeast	44	38	82
Interior	11	51	62
Northern	2	15	17
Southwest	17	32	49
p=0.0000	**138**	**461**	599

Expected *Lack of Housing*	Yes	No	
Anchor/Mat-Su	46.54	155.46	202
Gulf Coast	10.60	35.40	46
Statewide	32.48	108.52	141
Southeast	18.89	63.11	82
Interior	14.28	47.72	62
Northern	3.92	13.08	17
Southwest	11.29	37.71	49
	138	**461**	599

Actual *Competition*	Yes	No	
Anchorage/Mat-Su	42	160	202
Gulf Coast	9	37	46
Statewide	43	99	142
Southeast	12	70	82
Interior	14	48	62
Northern	9	8	17
Southwest	12	37	49
p=0.0105	**141**	**459**	600

Expected *Competition*	Yes	No	
Anchorage/Mat-Su	47.47	154.53	202
Gulf Coast	10.81	35.19	46
Statewide	33.37	108.63	142
Southeast	19.27	62.73	82
Interior	14.57	47.43	62
Northern	4.00	13.01	17
Southwest	11.52	37.49	49
	141	**459**	600

Actual *Lack of Transportation*	Yes	No	
Anchorage/Mat-Su	40	162	202
Gulf Coast	7	39	46
Statewide	35	106	141
Southeast	13	69	82
Interior	10	52	62
Northern	5	12	17
Southwest	13	36	49
p=0.4021	**123**	**476**	599

Expected *Lack of Transportation*	Yes	No	
Anchorage/ Mat-Su	41.48	160.52	202
Gulf Coast	9.45	36.55	46
Statewide	28.95	112.05	141
Southeast	16.84	65.16	82
Interior	12.73	49.27	62
Northern	3.49	13.51	17
Southwest	10.06	38.94	49
	123	**476**	599

Actual *Lack of Child/Elder Care*	Yes	No	
Anchorage/Mat-Su	27	175	202
Gulf Coast	5	41	46
Statewide	29	112	141
Southeast	25	57	82
Interior	14	48	62
Northern	3	14	17
Southwest	10	39	49
p=0.0289	**113**	**486**	599

Expected *Lack of Child/Elder Care*	Yes	No	
Anchorage/Mat-Su	38.11	163.89	202
Gulf Coast	8.68	37.32	46
Statewide	26.60	114.40	141
Southeast	15.47	66.53	82
Interior	11.70	50.30	62
Northern	3.21	13.79	17
Southwest	9.24	39.76	49
	113	**486**	599

Actual *Work Demand*	Yes	No	
Anchorage/Mat-Su	39	163	202
Gulf Coast	4	42	46
Statewide	34	108	142
Southeast	11	71	82
Interior	18	44	62
Northern	6	11	17
Southwest	8	41	49
p=0.0371	**120**	**480**	600

Expected *Work Demand*	Yes	No	
Anchorage/Mat-Su	40.40	161.60	202
Gulf Coast	9.20	36.80	46
Statewide	28.40	113.60	142
Southeast	16.40	65.60	82
Interior	12.40	49.60	62
Northern	3.40	13.60	17
Southwest	9.80	39.20	49
	120	**480**	600

Actual *No Local/Regional Training*	Yes	No	
Anchorage/Mat-Su	24	178	202
Gulf Coast	9	37	46
Statewide	18	123	141
Southeast	20	62	82
Interior	7	55	62
Northern	3	14	17
Southwest	17	32	49
p=0.0014	**98**	**501**	599

Expected *No Local/Regional Training*	Yes	No	
Anchorage/Mat-Su	33.05	168.95	202
Gulf Coast	7.53	38.47	46
Statewide	23.07	117.93	141
Southeast	13.42	68.58	82
Interior	10.14	51.86	62
Northern	2.78	14.22	17
Southwest	8.02	40.98	49
	98	**501**	599

Actual			
Cultural Practices			
	Yes	No	
Anchorage/Mat-Su	3	199	202
Gulf Coast	1	45	46
Statewide	7	134	141
Southeast	2	80	82
Interior	4	58	62
Northern	0	17	17
Southwest	2	47	49
p=0.3696	**19**	**580**	599

Expected			
Cultural Practices			
	Yes	No	
Anchorage/Mat-Su	6.41	195.59	202
Gulf Coast	1.46	44.54	46
Statewide	4.47	136.53	141
Southeast	2.60	79.40	82
Interior	1.97	60.03	62
Northern	0.54	16.46	17
Southwest	1.55	47.45	49
	19	**580**	599

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
Unsubscribe - Unsubscribe Preferences

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 "Linkedln" 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 future[1]. 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.