

Alaska's Workforce Future: Student Survey

Attachments

1-5

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Attachment 1: Respondent Demographics

Three hundred fifty-two surveys were used in the analyses. The table shows the distribution of respondents by economic region. Personal identifiers were not collected. Zip codes were used to approximate urban vs rural areas.

Respondents by Economic Region (Based on Zip Codes)	Survey Counts	Rural Counts	Urban Counts
Gulf Coast	168	7	7
Anchorage/Mat-Su	80	0	80
Southeast	42	42	0
Interior	27	12	15
Southwest	26	26	0
Northern	6	6	0
Not Reported	3	--	--
TOTAL	352	250	102

Age

The mean age of respondents is 21, with a median age of 17. For analysis, a few surveys from respondents under 13 years old and over 65 years old were excluded.

Age of Survey Respondents	
Mean	21.32
Median	17
Standard Deviation	10.610
Min/Max	13/65
Count	346

Gender

Gender was collected as free-form entry.

Gender	male	female	other	total
Count	171	161	14	346

School/Work Status

School or work status includes 74% high school students, followed by high school graduates or GED completers. Some respondents belong to more than one category; some high school students or college students are also interns or in dual credit programs,

School/Work Status	Mean	Standard Error	Standard Deviation	Sample Variance	Sum	Count
Mean = percent						
HS Student	0.739	0.0234	0.4396	0.1932	260	349
HS Graduate or GED	0.142	0.0186	0.3492	0.1219	50	349
College Student	0.082	0.0146	0.2750	0.0756	29	349
College Graduate	0.082	0.0146	0.2750	0.0756	29	349
Tech Train Student	0.048	0.0114	0.2144	0.0460	17	349
Dual Credit	0.045	0.0111	0.2083	0.0434	16	349
Not in School	0.040	0.0104	0.1954	0.0382	14	349
Apprentice	0.034	0.0097	0.1815	0.0329	12	349
Other	0.028	0.0088	0.1661	0.0276	10	349
Intern	0.025	0.0084	0.1578	0.0249	9	349
Tech Train Graduate	0.014	0.0063	0.1183	0.0140	5	349

and a number of the high school graduates are also "not in school." In general, a fair cross-section of respondents, with the desired emphasis on high school students, was obtained.

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Attachment 2: Barriers Perceived by Respondents

Respondents identify these 14 barriers to their advancement on a career path in Alaska: FINANCES (51%), NEED SCHOLARSHIP/LOAN (32%), UNCERTAINTY (30%), NEED OTHER TRAINING/SKILLS (29%), HOUSING (24%), TRANSPORTATION (22%), NEED EMPLOYER (13%), NO SUPPORT (13%), NEED MENTOR (12%), CAN'T FIND TRAINING (12%), NO APPLICATION ASSISTANCE (11%), NO INTERNET (10%), NO INTERNSHIP (10%), and NO APPRENTICESHIP (8%).

Barriers Prevent Taking Desired Job Or Career Path	Mean	Standard Error	Standard Deviation	Sample Variance	Sum	N=
Mean = percent						
Finances	0.51	0.027	0.501	0.251	181	349
Need Scholarship/Loan	0.32	0.025	0.468	0.219	113	349
Uncertainty	0.30	0.024	0.458	0.210	105	349
Need other training/skills	0.29	0.024	0.456	0.208	103	349
Housing	0.24	0.023	0.429	0.184	85	349
Transportation	0.22	0.022	0.418	0.175	79	349
Need Employer	0.13	0.018	0.334	0.112	45	349
No support	0.13	0.018	0.341	0.116	47	349
Need Mentor	0.12	0.017	0.328	0.108	43	349
Can't find training	0.12	0.017	0.321	0.103	41	349
Application assistance	0.11	0.017	0.318	0.101	40	349
No Internet	0.10	0.016	0.296	0.088	34	349
No internship	0.10	0.016	0.300	0.090	35	349
No apprenticeship	0.08	0.014	0.267	0.071	27	349
Child Care	0.05	0.012	0.221	0.049	18	349
Elder Care	0.02	0.007	0.130	0.017	6	349
None	0.15	0.019	0.362	0.131	54	349

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Attachment 3: Chi-Square Tests – Motivating Barriers: Rural vs Urban

URBAN VERSUS RURAL

		Actual					Expected		
		Thought a lot about career and job opportunities.	No Thought a lot about career and job opportunities.				Thought a lot about career and job opportunities.	No Thought a lot about career and job opportunities.	
URBAN		64	38	102	URBAN		58.83	43.17	102
RURAL		135	108	243	RURAL		140.17	102.83	243
		199	146	345			199	146	345
									$p=0.2174$

		Actual					Expected		
		Finances	No Finances				Finances	No Finances	
URBAN		57	45	102	URBAN		37.55	64.45	102
RURAL		70	173	243	RURAL		89.45	153.55	243
		127	218	345			127	218	345
									$p=0.0000$

		Actual					Expected		
		Need Child Care	No Need Child Care				Need Child Care	No Need Child Care	
URBAN		13	89	102	URBAN		5.32	96.68	102
RURAL		5	238	243	RURAL		12.68	230.32	243
		18	327	345			18	327	345
									$p=0.0000$

		Actual					Expected		
		Internet	No Internet				Internet	No Internet	
URBAN		68	34	102	URBAN		56.47	45.53	102
RURAL		123	120	243	RURAL		134.53	108.47	243
		191	154	345			191	154	345
									$p=0.0062$

	Actual		
	Need Transportation	No Need Transportation	
URBAN	26	76	102
RURAL	52	191	243
	78	267	345

	Expected		
	Need Transportation	No Need Transportation	
URBAN	23.06	78.93	102
RURAL	54.93	188.06	243
	78	267	345

p=0.4071

	Actual		
	Need Housing	No Need Housing	
URBAN	26	76	102
RURAL	90	153	243
	116	229	345

	Expected		
	Need Housing	No Need Housing	
URBAN	34.29	67.70	102
RURAL	81.70	161.29	243
	116	229	345

p=0.0383

	Actual		
	No support	Not No support	
URBAN	19	83	102
RURAL	27	216	243
	46	299	345

	Expected		
	No support	Not No support	
URBAN	13.60	88.40	102
RURAL	32.40	210.60	243
	46	299	345

p=0.0609

	Actual		
	Uncertainty	Not Uncertainty	
URBAN	36	66	102
RURAL	26	217	243
	62	283	345

	Expected		
	Uncertainty	Not Uncertainty	
URBAN	18.33	83.66	102
RURAL	43.66	199.33	243
	62	283	345

p=0.0000

	Actual		
	Need Mentor	No Need Mentor	
URBAN	19	81	100
RURAL	24	219	243
	43	300	343

	Expected		
	Need Mentor	No Need Mentor	
URBAN	12.53	87.46	100
RURAL	30.46	212.53	243
	43	300	343

p=0.0204

	Actual		
	Need other training or skills	No Need other training or skills	
URBAN	18	84	102
RURAL	58	185	243
	76	269	345

	Expected		
	Need other training or skills	No Need other training or skills	
URBAN	22.46	79.53	102
RURAL	53.53	189.46	243
	76	269	345

p=0.2032

	Actual		
	Move to other state or country.	No Move to other state or country.	
URBAN	63	39	102
RURAL	153	90	243
	216	129	345

	Expected		
	Move to other state or country.	No Move to other state or country.	
URBAN	63.86	38.13	102
RURAL	152.13	90.86	243
	216	129	345

p=0.8337

	Actual		
	Need Scholarship/Loan	No Need Scholarship/Loan	
URBAN	35	67	102
RURAL	74	169	243
	109	236	345

	Expected		
	Need Scholarship/Loan	No Need Scholarship/Loan	
URBAN	32.22	69.77	102
RURAL	76.77	166.22	243
	109	236	345

p=0.4815

	Actual		
	Need Elder Care	No Need Elder Care	
URBAN	3	99	102
RURAL	3	240	243
	6	339	345

	Expected		
	Need Elder Care	No Need Elder Care	
URBAN	1.77	100.22	102
RURAL	4.22	238.77	243
	6	339	345

p=0.2685

	Actual		
	Need internship	No Need internship	
URBAN	11	91	102
RURAL	19	224	243
	30	315	345

	Expected		
	Need internship	No Need internship	
URBAN	8.86	93.13	102
RURAL	21.13	221.86	243
	30	315	345

p=0.3724

	Actual		
	Need Employer	No Need Employer	
URBAN	19	83	102
RURAL	25	218	243
	44	301	345

	Expected		
	Need Employer	No Need Employer	
URBAN	13.00	88.99	102
RURAL	30.99	212.00	243
	44	301	345

p=0.0341

	Actual		
	Need apprenticeship	No Need apprenticeship	
URBAN	12	90	102
RURAL	14	229	243
	26	319	345

	Expected		
	Need apprenticeship	No Need apprenticeship	
URBAN	7.68	94.31	102
RURAL	18.31	224.68	243
	26	319	345

p=0.0539

	Actual		
	Can't find training	No issue find training	
URBAN	15	87	102
RURAL	25	218	243
	40	305	345

	Expected		
	Can't find training	No issue find training	
URBAN	11.82	90.17	102
RURAL	28.17	214.82	243
	40	305	345

p=0.2422

	Actual		
	No assistance with applications	Not No assistance with applications	
URBAN	12	90	102
RURAL	27	216	243
	39	306	345

	Expected		
	No assistance with applications	Not No assistance with applications	
URBAN	11.53	90.46	102
RURAL	27.46	215.53	243
	39	306	345

p=0.8611

	Actual		
	No advisor support	Not No advisor support	
URBAN	12	90	102
RURAL	32	211	243
	44	301	345

	Expected		
	No advisor support	Not No advisor support	
URBAN	13.00	88.99	102
RURAL	30.99	212.00	243
	44	301	345

p=0.7213

	Actual		
	None	Not None	
URBAN	8	94	102
RURAL	46	197	243
	54	291	345

	Expected		
	None	Not None	
URBAN	15.96	86.03	102
RURAL	38.03	204.96	243
	54	291	345

p=0.0097

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Attachment 4: Chi-Square Tests – Methods of Looking at Careers and Thinking of Leaving Alaska

Some methods of looking into careers and/or job opportunities are associated with increased or decreased likelihood of respondents thinking about leaving the state. The totality of the method options considered in this report are presented in Chi-square comparisons below. All those related to exploring career/jobs options Q2 are included, along with a few others that may be of interest. Most of those which are significant are discussed in the body of the report.

	Actual			Expected		
	Job Fair	No Fair		Job Fair	No Fair	
LEAVE	46	169	215	53.75	161.25	215
STAY	40	89	129	32.25	96.75	129
	86	258	344	86	258	344
				p= 0.046		

	Actual			Expected		
	Counselors	No Counselors		Counselors	No Counselors	
LEAVE	69	146	215	63.125	151.875	215
STAY	32	97	129	37.875	91.125	129
	101	243	344	101	243	344
				p= 0.151		

	Actual			Expected		
	Career Course	No Career Course		Career Course	No Career Course	
LEAVE	40	175	215	36.25	178.75	215
STAY	18	111	129	21.75	107.25	129
	58	286	344	58	286	344
				p= 0.265		

	Actual			Expected		
	School to Work	No School to Work		School to Work	No School to Work	
LEAVE	53	162	215	56.88	158.13	215
STAY	38	91	129	34.125	94.875	129
	91	253	344	91	253	344
				p= 0.328		

	Actual			Expected		
	Ask Family	No Ask Family		Ask Family	No Ask Family	
LEAVE	122	93	215	115.63	99.38	215
STAY	63	66	129	69.38	59.63	129
	185	159	344	185	159	344
				p= 0.154		

	Actual		
	Internet	No Internet	
LEAVE	132	83	215
STAY	59	70	129
	191	153	344

	Expected		
	Internet	No Internet	
LEAVE	119.38	95.63	215
STAY	71.63	57.38	129
	191	153	344

p= 0.005

	Actual		
	Ask friends	No Ask friends	
LEAVE	75	142	217
STAY	59	68	127
	134	210	344

	Expected		
	Ask friends	No Ask friends	
LEAVE	84.53	132.47	217
STAY	49.47	77.53	127
	134	210	344

p= 0.029

	Actual		
	heard about apprenticeships	no heard about apprenticeships	
LEAVE	40	185	225
STAY	10	109	119
	50	294	344

	Expected		
	heard about apprenticeships	no heard about apprenticeships	
LEAVE	32.70	192.30	225
STAY	17.30	101.70	119
	50	294	344

p= 0.019

	Actual		
	AK Perform Scholarship	No AK Perform Scholarship	
LEAVE	81	134	215
STAY	40	89	129
	121	223	344

	Expected		
	AK Perform Scholarship	No AK Perform Scholarship	
LEAVE	75.625	139.375	215
STAY	45.375	83.625	129
	121	223	344

p= 0.210

	Actual		
	Military	No Military	
LEAVE	20	182	202
STAY	13	115	128
	33	297	330

	Expected		
	Military	No Military	
LEAVE	20.2	181.8	202
STAY	12.8	115.2	128
	33	297	330

p= 0.940

	Actual		
	Elective Courses in HS	No Elective Courses in HS	
LEAVE	86	129	215
STAY	51	78	129
	137	207	344

	Expected		
	Elective Courses in HS	No Elective Courses in HS	
LEAVE	85.625	129.375	215
STAY	51.375	77.625	129
	137	207	344

p= 0.932

	Actual		
	Heard about internships in school	No Heard about internships in school	
LEAVE	33	182	215
STAY	21	108	129
	54	290	344

	Expected		
	Heard about internships in school	No Heard about internships in school	
LEAVE	33.75	181.25	215
STAY	20.25	108.75	129
	54	290	344

p= 0.818

	Actual		
	HS Student	Not HS Student	
LEAVE	164	51	215
STAY	89	40	129
	253	91	344

	Expected		
	HS Student	Not HS Student	
LEAVE	158.13	56.88	215
STAY	94.88	34.13	129
	253	91	344

p= 0.138

	Actual		
	Employed FT	Not Employed FT	
LEAVE	28	187	215
STAY	26	103	129
	54	290	344

	Expected		
	Employed FT	Not Employed FT	
LEAVE	33.75	181.25	215
STAY	20.25	108.75	129
	54	290	344

p= 0.078

	Actual		
	Not Employed	Employed FT or PT	
LEAVE	85	130	215
STAY	56	73	129
	141	203	344

	Expected		
	Not Employed	Employed FT or PT	
LEAVE	88.13	126.88	215
STAY	52.88	76.13	129
	141	203	344

p= 0.479

	Actual		
	Seeking Employment	Not seeking employment	
LEAVE	48	167	215
STAY	33	96	129
	81	263	344

	Expected		
	Seeking Employment	Not seeking employment	
LEAVE	50.63	164.38	215
STAY	30.38	98.63	129
	81	263	344

p= 0.491

	Actual		
	studies useful in your future career/job?	studies not useful in your future career/job?	
LEAVE	174	39	213
STAY	97	31	128
	271	70	341

	Expected		
	studies useful in your future career/job?	studies not useful in your future career/job?	
LEAVE	169.28	43.72	213
STAY	101.72	26.28	128
	271	70	341

p= 0.191

	Actual		
	Complete training or education in AK	Not complete training or education in AK	
LEAVE	80	135	215
STAY	89	40	129
	169	175	344

	Expected		
	Complete training or education in AK	Not complete training or education in AK	
LEAVE	105.63	109.38	215
STAY	63.38	65.63	129
	169	175	344

p= 0.000

	Actual		
	Age > 21	Age <=21	
LEAVE	42	173	215
STAY	39	90	129
	81	263	344

	Expected		
	Age > 21	Age <=21	
LEAVE	50.63	164.38	215
STAY	30.38	98.63	129
	81	263	344

p= 0.024

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Attachment 5: Chi-Square Tests – AKCIS and Methods of Looking at Careers/Jobs

AKCIS was not widely recognized by respondents. However, it was significantly associated with several key methods for engaging students, young adults, and job seekers with career opportunities, some of which were shown to be associated with a lower likelihood of respondents thinking about leaving Alaska. All Chi-square results are presented, regardless of association.

	Actual			Expected		
	Job Fairs	No Job Fairs		Job Fairs	No Job Fairs	
AKCIS	16	19	35	8.775	26.225	35
NO AKCIS	72	244	316	79.225	236.775	316
	88	263	351			351
				p= 0.003		

	Actual			Expected		
	Career Course	No Career Course		Career Course	No Career Course	
AKCIS	14	21	35	5.783	29.217	35
NO AKCIS	44	272	316	52.217	263.783	316
	58	293	351			351
				p= 0.000		

	Actual			Expected		
	Yes heard about apprenticeships in school	No heard about apprenticeships in school		Yes heard about apprenticeships in school	No heard about apprenticeships in school	
AKCIS	13	22	35	4.986	30.014	35
NO AKCIS	37	279	316	45.014	270.986	316
	50	301	351			351
				p= 0.000		

	Actual			Expected		
	Counselors	No Counselors		Counselors	No Counselors	
AKCIS	16	19	35	10.171	24.829	35
NO AKCIS	86	230	316	91.829	224.171	316
	102	249	351			351
				p= 0.022		

		Actual		
		Yes, Heard About Alaska Performance Scholarship	No, Heard About Alaska Performance Scholarship	
AKCIS		8	27	35
NO AKCIS		113	203	316
		121	230	351

		Expected		
		Yes, Heard About Alaska Performance Scholarship	No, Heard About Alaska Performance Scholarship	
AKCIS		12.066	22.934	35
NO AKCIS		108.934	207.066	316
		121	230	351

p= 0.128

		Actual		
		Ask Family	No Ask Family	
AKCIS		15	20	35
NO AKCIS		174	142	316
		189	162	351

		Expected		
		Ask Family	No Ask Family	
AKCIS		18.846	16.154	35
NO AKCIS		170.154	145.846	316
		189	162	351

p= 0.169

		Actual		
		Yes heard about internships in school	No heard about internships in school	
AKCIS		6	29	35
NO AKCIS		47	269	316
		53	298	351

		Expected		
		Yes heard about internships in school	No heard about internships in school	
AKCIS		5.285	29.715	35
NO AKCIS		47.715	268.285	316
		53	298	351

p= 0.722

		Actual		
		School to Work	No School to Work	
AKCIS		15	20	35
NO AKCIS		119	197	316
		134	217	351

		Expected		
		School to Work	No School to Work	
AKCIS		13.36	21.64	35
NO AKCIS		120.64	195.36	316
		134	217	351

p= 0.548

		Actual		
		Internet	No Internet	
AKCIS		16	19	35
NO AKCIS		178	138	316
		194	157	351

		Expected		
		Internet	No Internet	
AKCIS		19.345	15.655	35
NO AKCIS		174.655	141.345	316
		194	157	351

p= 0.231

	Actual		
	Taken Elective Courses in High School	No Taken Elective Courses in High School	
AKCIS	11	24	35
NO AKCIS	130	186	316
	141	210	351

	Expected		
	Taken Elective Courses in High School	No Taken Elective Courses in High School	
AKCIS	14.060	20.940	35
NO AKCIS	126.940	189.060	316
	0.2662	141	210 351

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