Analysis of Employer One Survey Data
Comparison between 2015, 2016 & 2017 data

DR. JAMES CHOWHAN

MCMASTER UNIVERSITY, DEGROOTE SCHOOL OF BUSINESS

DR. SARA MANN

UNIVERSITY OF GUELPH, DEPARTMENT OF MANAGEMENT

DR. GORDON COOKE

MEMORIAL UNIVERSITY OF NEWFOUNDLAND, FACULTY OF BUSINESS ADMINISTRATION

OCTOBER 2018

# Reminder of the Value Added From Aggregate Analysis

- Examined entire dataset and used mean to determine which regions are above and below the benchmark

- Our analysis provides information on which findings are statistically significant
  - Substantial vs. statistically significant

- Ability to analyze data across regions so results are comparable
  - Comparisons of outcomes can be imprecise if missing data are treated differently
  - Our analysis corrects for this concern, by treating all missing data consistently

Descriptive Stats: Sample Sizes

	2015	2016	2017
TOTAL	1914	2046	2611
BRUCEGREY HURONPERTH	293	532	729
CHATHAMKENT	206	120	198
HAMILTON	173	143	240
ELGINMIDDLESEX OXFORD	489	320	368
GRANDERIE	200	260	364
WWD	155	184	401
NIAGARA	73	204	85
WINDSORESSEX	209	151	83
SARNIALAMBTON	116	132	143
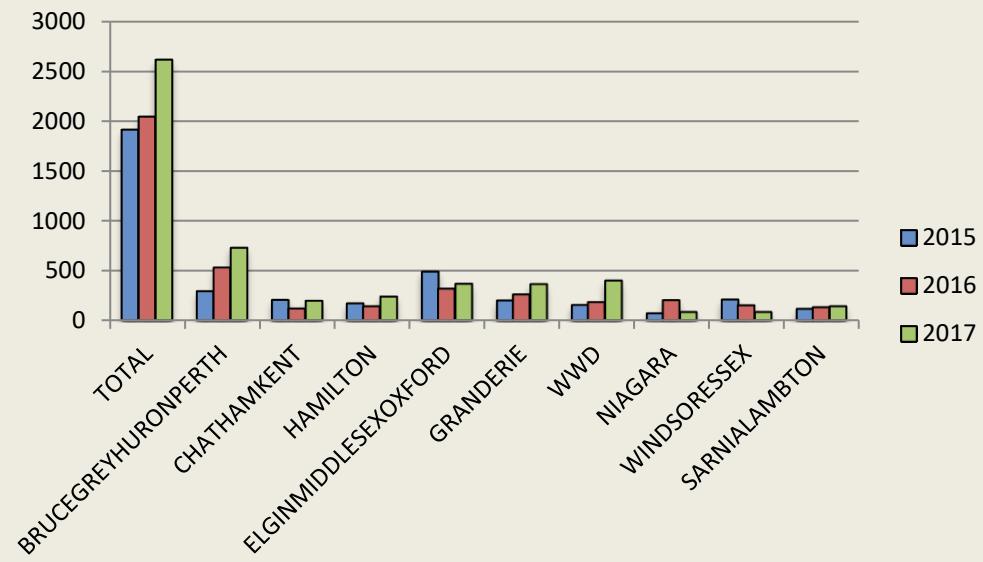
Descriptive Stats: Sample Sizes by Industry

	2015	2016	2017
Accom_Food	68	105	169
Waste_Mgt	16	47	42
Agriculture	68	118	166
Arts_Rec	60	74	103
Construction	88	154	201
Education	68	91	93
Fin_Insur	54	81	102
Health_Social	128	193	199
Info_Cultural	20	42	48
Management	6	7	16
Manufacturing	264	307	388
Mining_Ext	3	6	5
Other_Serv	263	223	300
ProfSciTech	117	180	217
Public_Admin	41	69	84
Realestate	10	27	38
Retail	131	225	307
Trans_Ware	44	40	71
Utilities	15	18	15
Wholesale	21	31	47
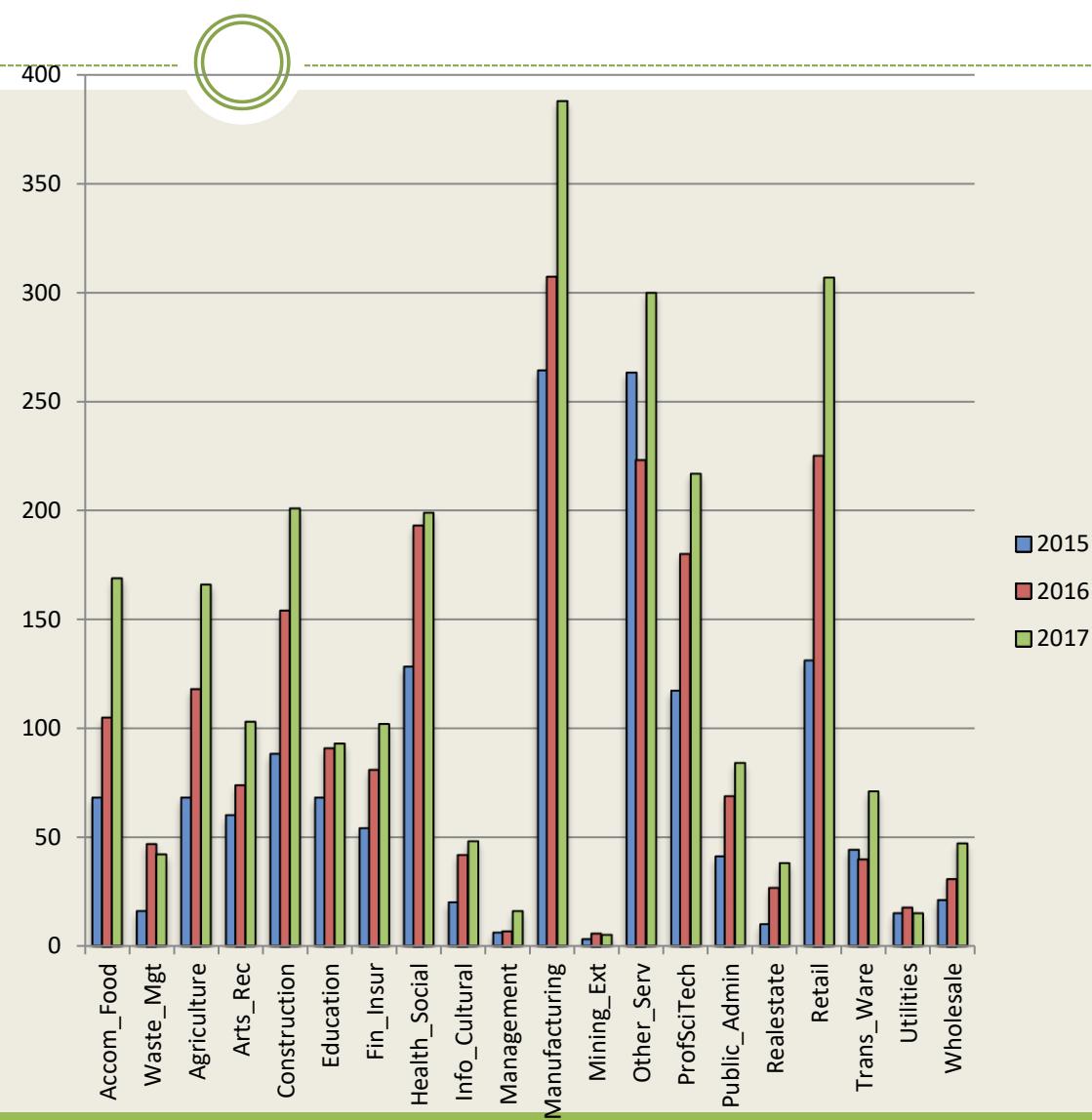
Means – 2015/2016/2017 comparison

	2015	2016	2017
Total emp	111	87	93
Separation	66%	62%	64%
Hire	78%	78%	75%
Recruit agency	12%	13%	17%
Hard to fill	48%	43%	41%
Plan to hire	68%	65%	66%
Training	79%	76%	71%

What is your total number of employees?

	2015	2016	2017
OVERALL MEAN	111	87	93
BRUCEGREY HURONPERTH	69	50	39
CHATHAMKENT	94	69	61
HAMILTON	374	256	298
ELGINMIDDLESEX OXFORD	119	119	110
GRANDERIE	61	58	58
WWD	62	74	108
NIAGARA	67	70	46
SARNIALAMBTON	173	36	55
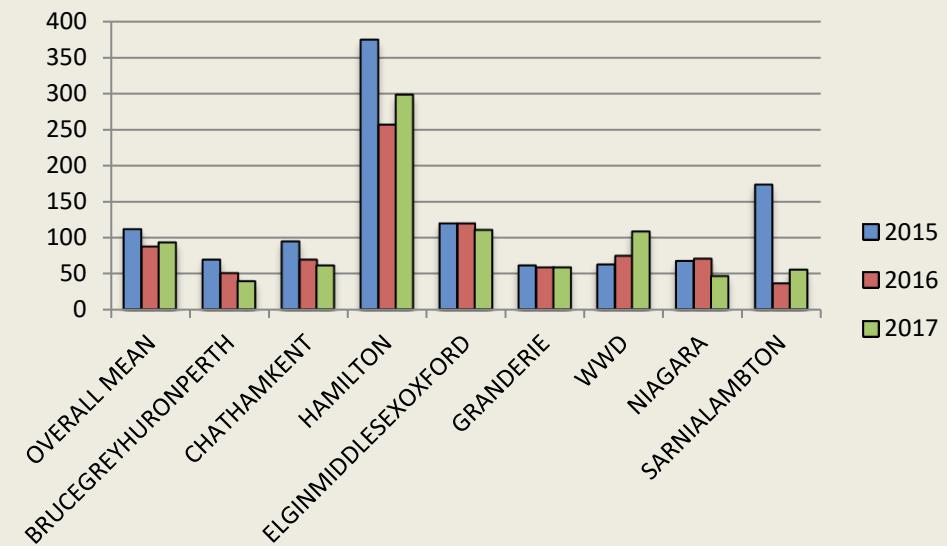
Did your organization experience any separations over the past 12 months?

	2015	2016	2017
OVERALL MEAN	0.66	0.62	0.64
BRUCEGREY HURONPERTH	0.67	0.58	0.61
CHATHAMKENT	0.59	0.56	0.66
HAMILTON	0.77	0.69	0.62
ELGINMIDDLESEX OXFORD	0.65	0.64	0.66
GRANDERIE	0.68	0.59	0.56
WWD	0.68	0.65	0.73
NIAGARA	0.53	0.59	0.59
WINDSORESSEX	0.69	0.6	0.63
SARNIALAMBTON	0.64	0.56	0.66
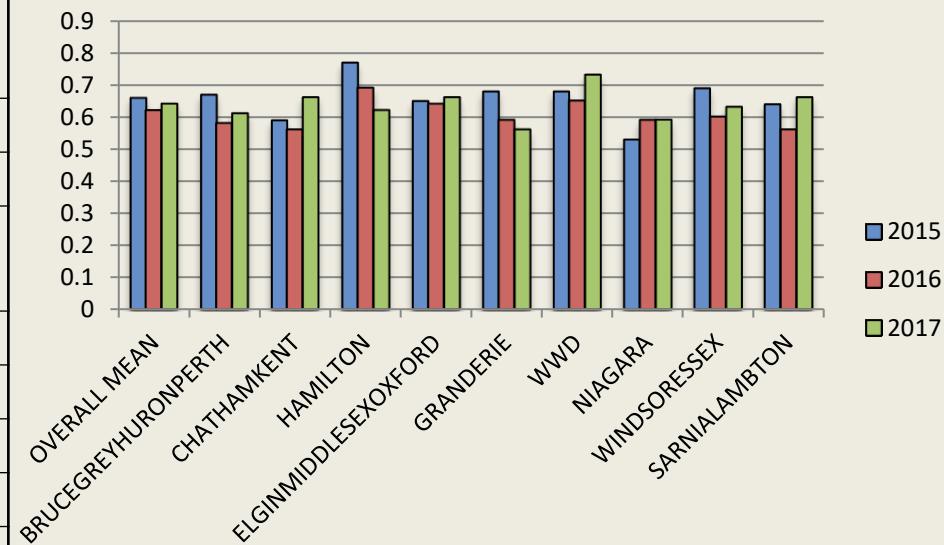
Did your organization hire anyone over the past 12 months?

	2015	2016	2017
OVERALL MEAN	0.78	0.78	0.75
BRUCEGREYHURON PERTH	0.76	0.73	0.7
CHATHAMKENT	0.74	0.69	0.68
HAMILTON	0.92	0.83	0.72
ELGINMIDDLESEX OXFORD	0.75	0.81	0.79
GRANDERIE	0.82	0.77	0.77
WWD	0.79	0.77	0.86
NIAGARA	0.67	0.72	0.81
WINDSORESSEX	0.8	0.72	0.71
SARNIALAMBTON	0.72	0.75	0.7
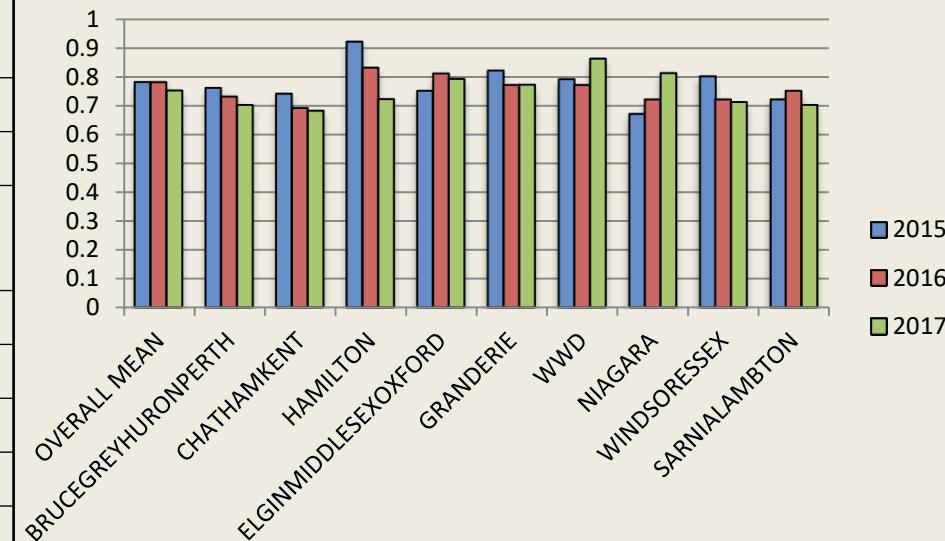
Did you use a paid recruitment agency?

	2015	2016	2017
OVERALL MEAN	0.12	0.13	0.17
BRUCEGREY HURONPERTH	0.05	0.11	0.1
CHATHAMKENT	0.08	0.1	0.18
HAMILTON	0.15	0.18	0.35
ELGINMIDDLESEX OXFORD	0.11	0.12	0.14
GRANDERIE	0.15	0.12	0.15
WWD	0.17	0.23	0.25
NIAGARA	0.15	0.13	0.15
SARNIALAMBTON	0.05	0.08	0.12
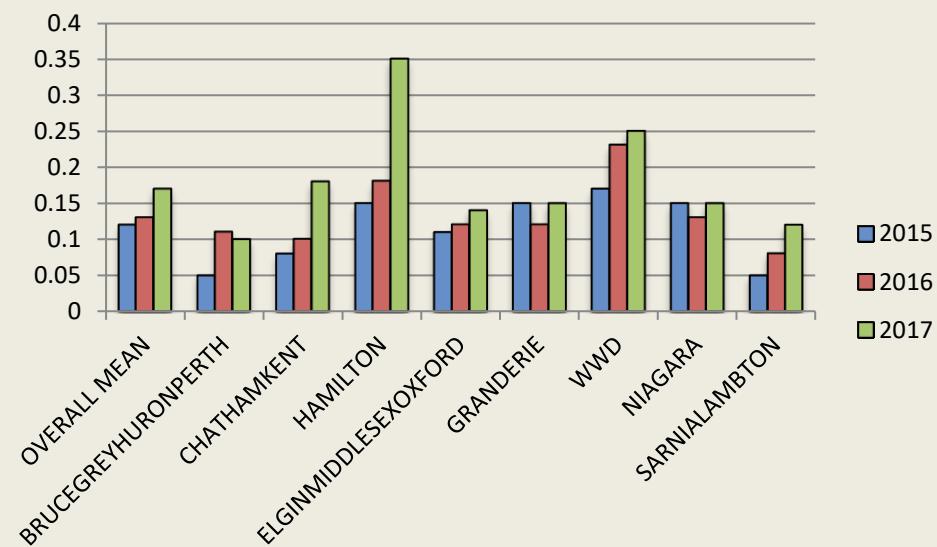
Were any of these positions hard to fill?

	2015	2016	2017
OVERALL MEAN	0.48	0.43	0.41
BRUCEGREY HURONPERTH	0.53	0.44	0.44
CHATHAMKENT	0.32	0.32	0.2
HAMILTON	0.63	0.51	0.35
ELGINMIDDLESEX OXFORD	0.45	0.42	0.46
GRANDERIE	0.48	0.4	0.39
WWD	0.45	0.48	0.54
NIAGARA	0.48	0.39	0.4
WINDSORESSEX	0.54	0.46	0.36
SARNIALAMBTON	0.39	0.46	0.31
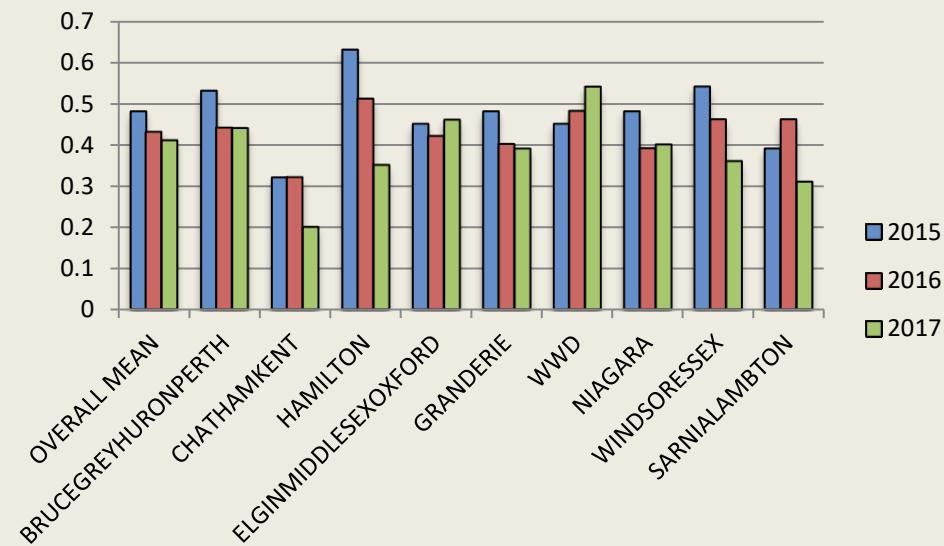
Do you plan on hiring in the next 12 months?

	2015	2016	2017
OVERALL MEAN	0.68	0.65	0.66
BRUCEGREY HURONPERTH	0.65	0.61	0.63
CHATHAMKENT	0.59	0.54	0.63
HAMILTON	0.87	0.69	0.72
ELGINMIDDLESEX OXFORD	0.68	0.68	0.67
GRANDERIE	0.69	0.61	0.64
WWD	0.68	0.76	0.76
NIAGARA	0.61	0.68	0.65
WINDSORESSEX	0.76	0.55	0.52
SARNIALAMBTON	0.6	0.58	0.59
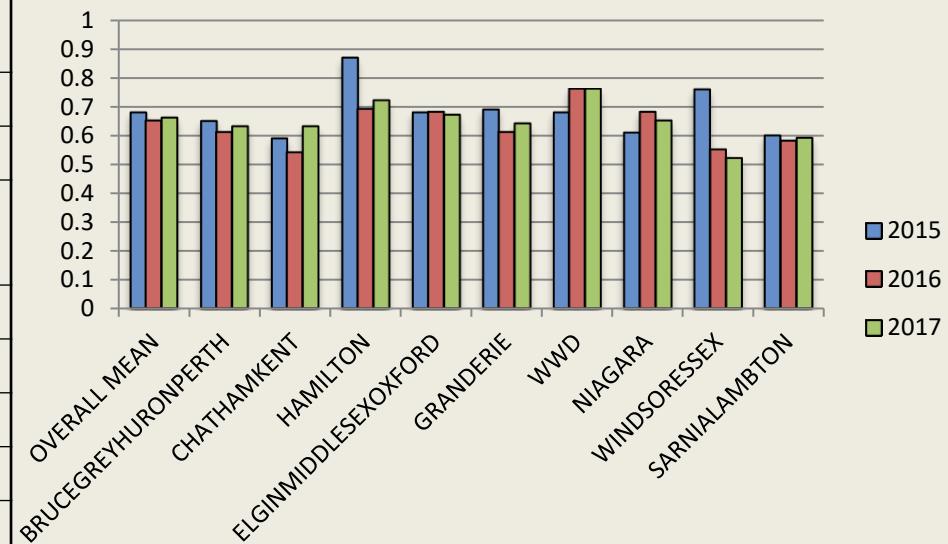
Was your organization able to provide or support on-going training and education opportunities for your employees last year?

	2015	2016	2017
OVERALL MEAN	0.79	0.76	0.71
BRUCEGREY HURONPERTH	0.77	0.75	0.66
CHATHAMKENT	0.81	0.77	0.4
HAMILTON	0.77	0.78	0.7
ELGINMIDDLESEX OXFORD	0.79	0.79	0.73
GRANDERIE	0.82	0.72	0.76
WWD	0.81	0.84	0.85
NIAGARA	0.82	0.69	0.84
SARNIALAMBTON	0.73	0.74	0.7
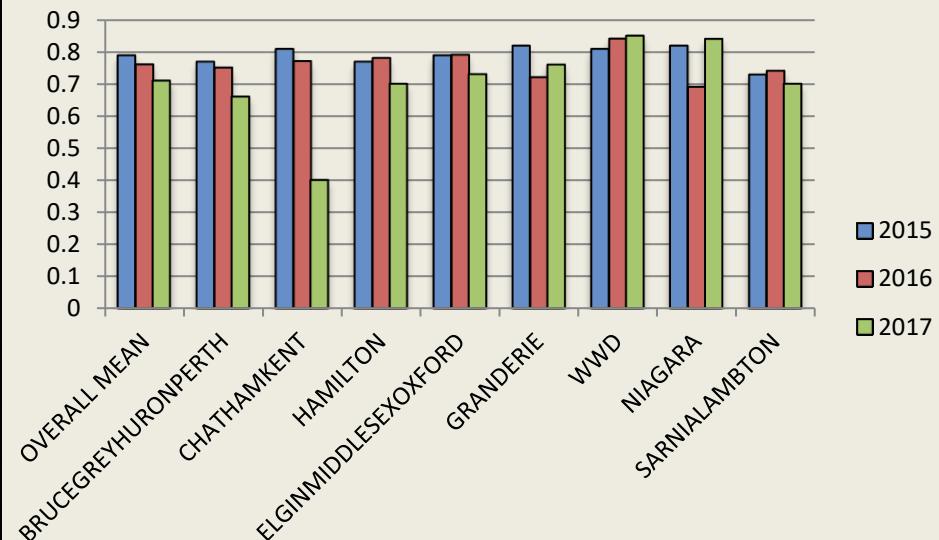
What is the size of your organization?
Analysis by industry

	2015	2016	2017
OVERALL MEAN	111	87	93
Accom_Food	45	32	30
Waste_Mgt	47	53	83
Agriculture	27	36	32
Arts_Rec	113	25	30
Construction	20	26	50
Education	456	255	218
Fin_Insur	107	47	47
Health_Social	116	195	169
Info_Cultural	20	22	19
Management	12	19	7
Manufacturing	194	120	149
Mining_Ext		252	127
Other_Serv	63	38	59
ProfSciTech	15	56	46
Public_Admin	376	261	335
Realestate	7	18	15
Retail	15	21	19
Trans_Ware	292	44	360
Utilities	116	346	385
Wholesale	24	31	66
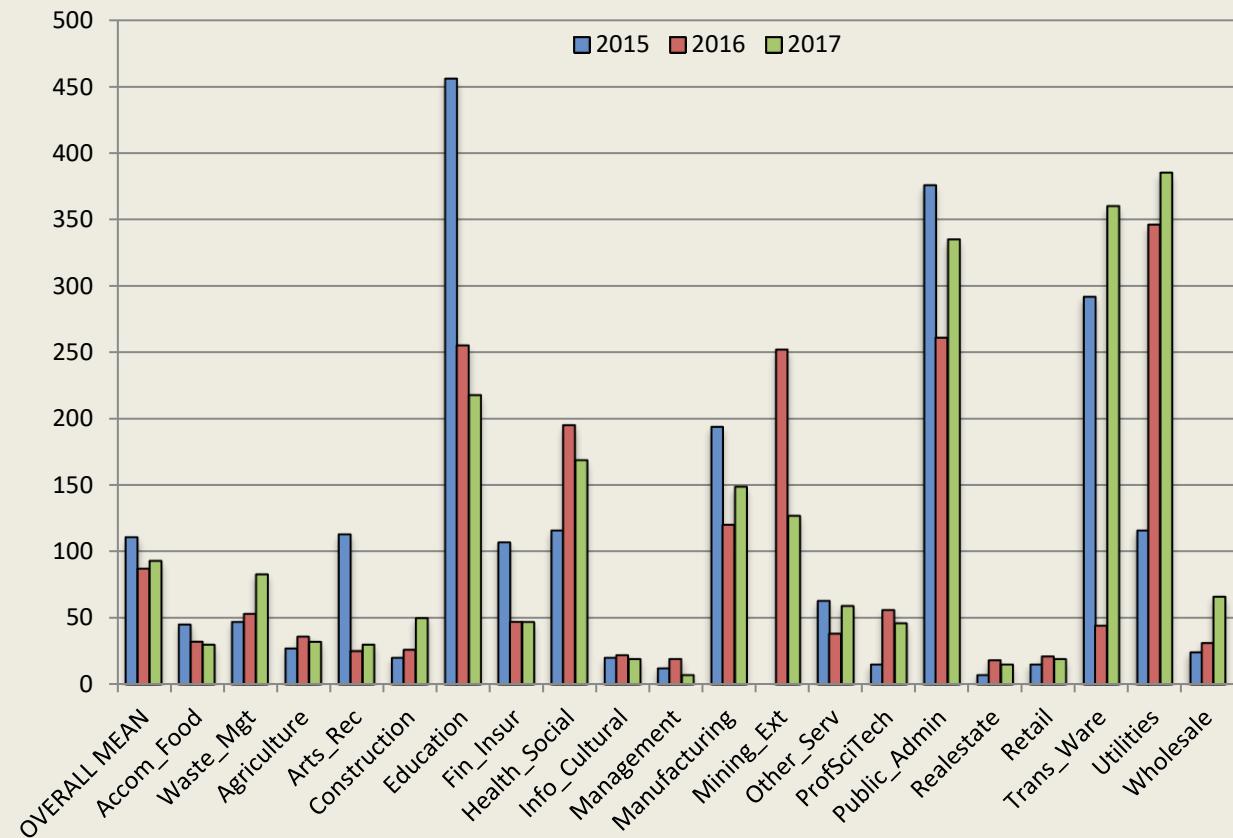
Did your organization experience any separations over the past 12 months? Analysis by Industry

	2015	2016	2017
OVERALL MEAN	**0.66**	**0.62**	0.63
Accom_Food	0.76	0.61	0.78
Waste_Mgt	0.71	0.77	0.64
Agriculture	0.7	0.58	0.61
Arts_Rec	0.55	0.39	0.49
Construction	0.78	0.64	0.72
Education	0.6	0.51	0.56
Fin_Insur	0.69	0.51	0.5
Health_Social	0.67	0.69	0.68
Info_Cultural	0.56	0.55	0.46
Management	0.5	0.29	0.25
Manufacturing	0.82	0.76	0.81
Mining_Ext		0.83	
Other_Serv	0.55	0.54	0.55
ProfSciTech	0.51	0.43	0.5
Public_Admin	0.86	0.8	0.82
Realestate	0.4	0.59	0.66
Retail	0.6	0.57	0.5
Trans_Ware	0.74	0.6	0.8
Utilities	0.92	0.83	0.8
Wholesale	0.4	0.61	0.62
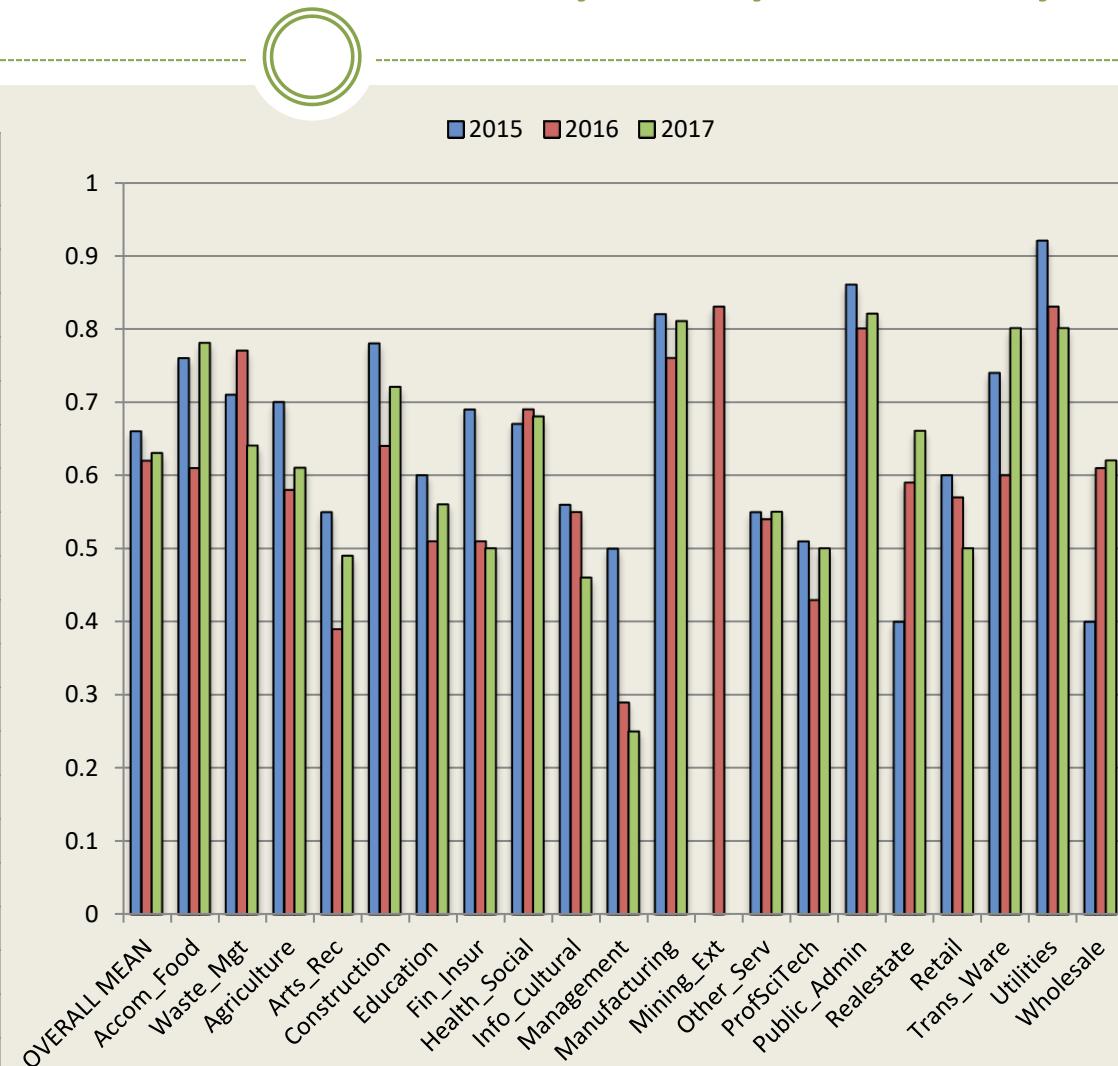
Did your organization hire anyone over the past 12 months? Analysis by Industry

	2015	2016	2017
OVERALL MEAN	**0.78**	**0.78**	0.75
Accom_Food	0.87	0.87	0.85
Waste_Mgt	0.79	0.94	0.74
Agriculture	0.8	0.74	0.77
Arts_Rec	0.78	0.7	0.72
Construction	0.84	0.77	0.8
Education	0.76	0.69	0.77
Fin_Insur	0.76	0.65	0.71
Health_Social	0.89	0.86	0.8
Info_Cultural	0.69	0.71	0.65
Management	0.33	0.43	0.44
Manufacturing	0.89	0.84	0.86
Mining_Ext		0.83	0.8
Other_Serv	0.67	0.69	0.7
ProfSciTech	0.67	0.66	0.64
Public_Admin	0.89	0.86	0.88
Realestate	0.7	0.67	0.61
Retail	0.68	0.69	0.63
Trans_Ware	0.81	0.83	0.86
Utilities		0.78	0.6
Wholesale	0.6	0.71	0.81
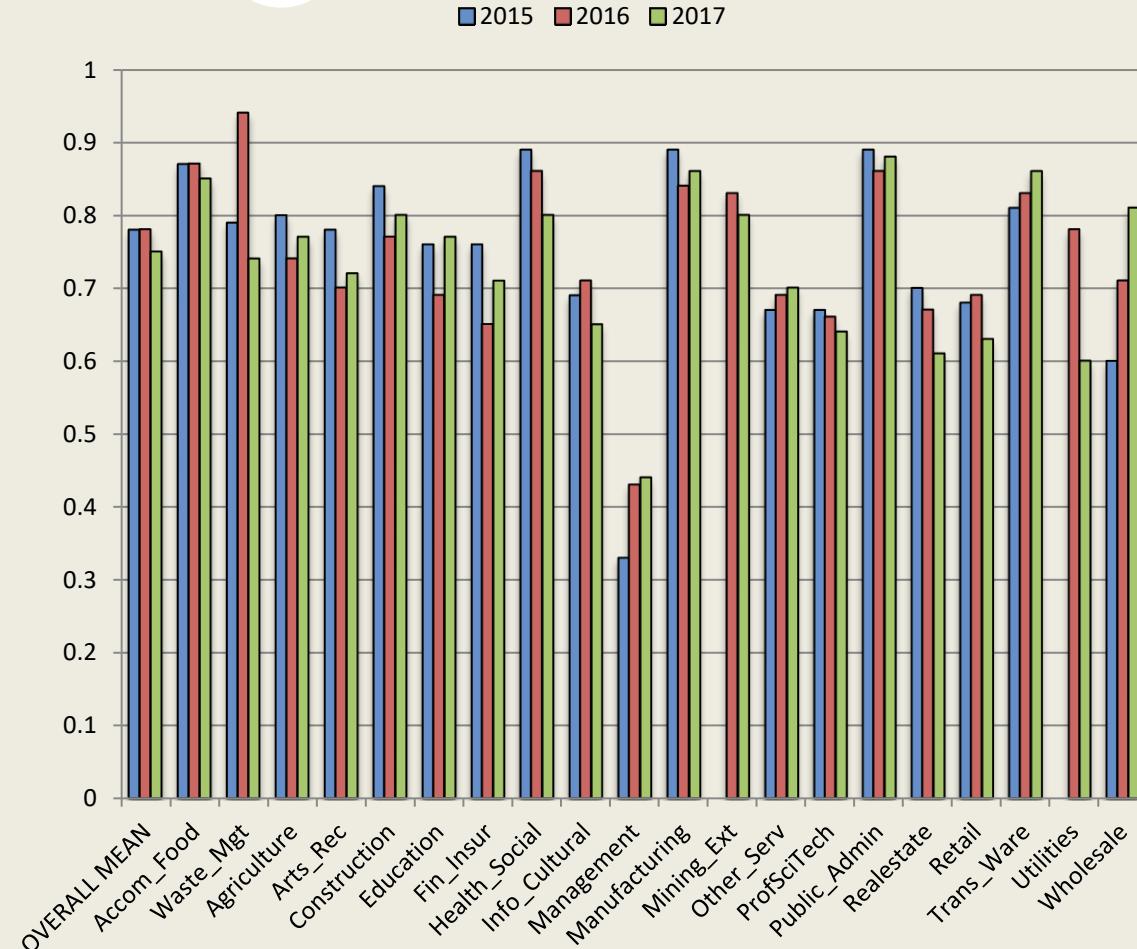
Did you use a paid recruitment agency?
Analysis by Industry

	2015	2016	2017
OVERALL MEAN	**0.12**	**0.13**	0.17
Accom_Food	0.06	0.01	0.1
Waste_Mgt	0.18	0.13	0.43
Agriculture	0.13	0.11	0.22
Arts_Rec		0.02	0.07
Construction	0.08	0.13	0.15
Education	0.05	0.05	0.08
Fin_Insur	0.13	0.07	0.1
Health_Social	0.06	0.07	0.13
Info_Cultural	0.18	0.05	0.1
Management	0.5	0.29	0.19
Manufacturing	0.25	0.36	0.37
Mining_Ext		0.17	0.4
Other_Serv	0.07	0.06	0.1
ProfSciTech	0.22	0.13	0.14
Public_Admin	0.07	0.14	0.11
Realestate		0.13	0.06
Retail	0.04	0.06	0.09
Trans_Ware	0.17	0.15	0.2
Utilities	0.23	0.62	0.17
Wholesale		0.26	0.15
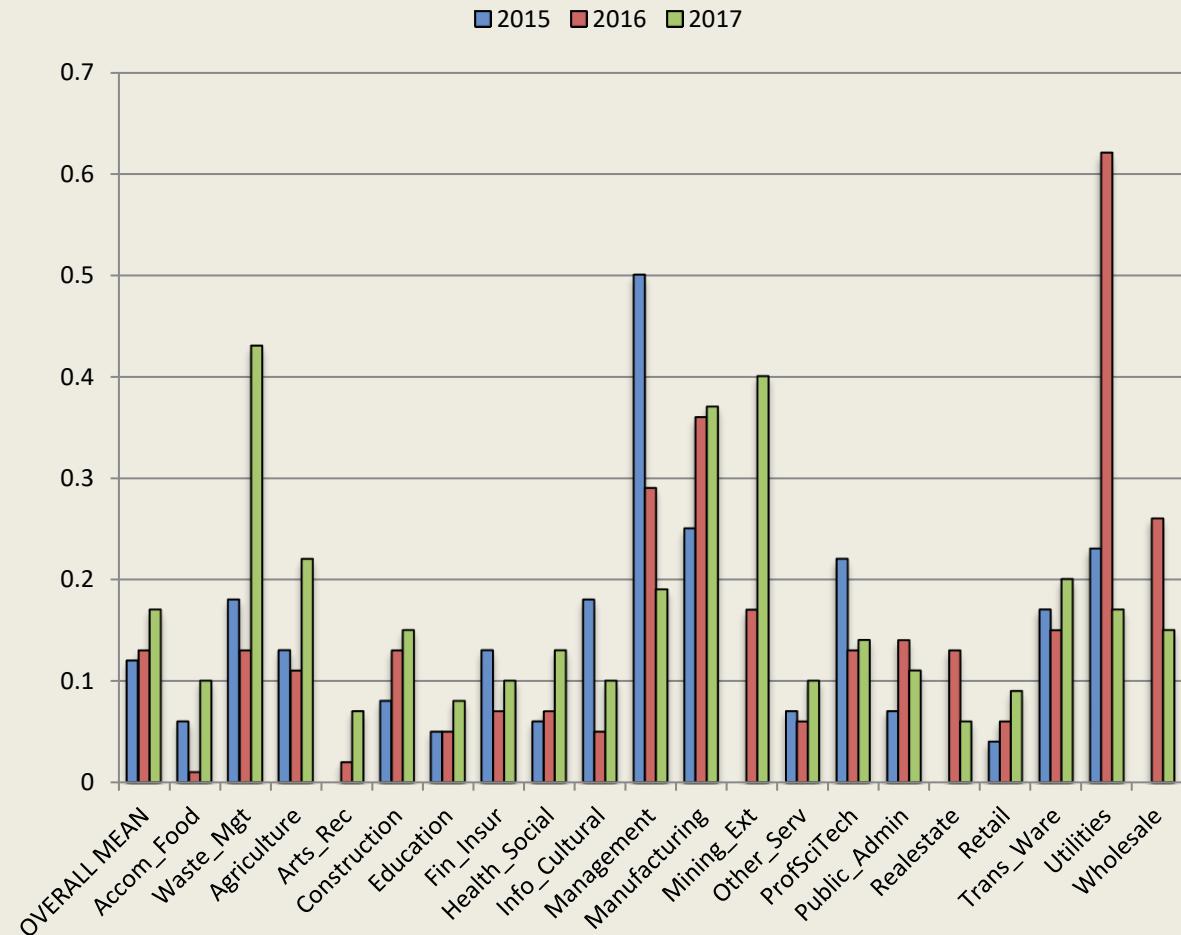
Were any of these positions hard to fill?
Analysis by Industry

	2015	2016	2017
OVERALL MEAN	**0.48**	**0.43**	0.41
Accom_Food	0.57	0.54	0.56
Waste_Mgt	0.73	0.53	0.4
Agriculture	0.51	0.42	0.49
Arts_Rec	0.45	0.29	0.3
Construction	0.54	0.46	0.53
Education	0.24	0.32	0.29
Fin_Insur	0.5	0.32	0.31
Health_Social	0.47	0.44	0.36
Info_Cultural	0.36	0.32	0.44
Management		0.29	0.13
Manufacturing	0.58	0.61	0.58
Mining_Ext		0.33	0.6
Other_Serv	0.35	0.33	0.3
ProfSciTech	0.5	0.32	0.34
Public_Admin	0.36	0.47	0.3
Realestate	0.33	0.37	0.24
Retail	0.39	0.36	0.35
Trans_Ware	0.79	0.55	0.68
Utilities	0.46	0.5	0.27
Wholesale	0.75	0.33	0.32
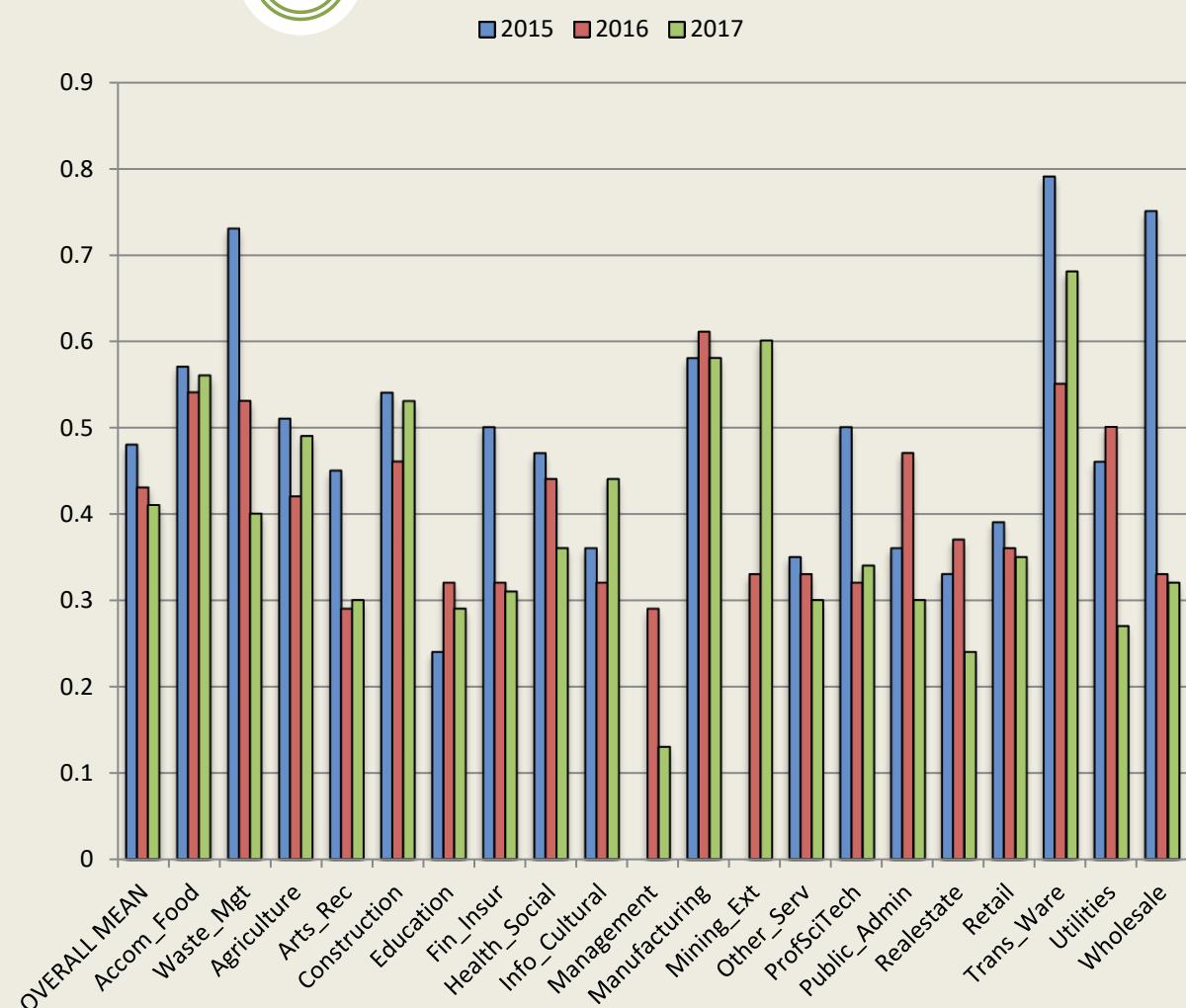
Do you plan on hiring in the next 12 months?
Analysis by Industry

	2015	2016	2017
OVERALL MEAN	**0.68**	**0.65**	0.66
Accom_Food	0.81	0.82	0.84
Waste_Mgt	0.79	0.72	0.6
Agriculture	0.74	0.62	0.73
Arts_Rec	0.82	0.62	0.68
Construction	0.72	0.68	0.74
Education	0.6	0.6	0.57
Fin_Insur	0.56	0.46	0.5
Health_Social	0.7	0.7	0.67
Info_Cultural	0.75	0.63	0.64
Management	0.5	0.14	0.44
Manufacturing	0.78	0.76	0.78
Mining_Ext		0.33	0.4
Other_Serv	0.59	0.6	0.58
ProfSciTech	0.62	0.58	0.58
Public_Admin	0.79	0.65	0.75
Realestate	0.22	0.59	0.53
Retail	0.53	0.47	0.54
Trans_Ware	0.87	0.76	0.87
Utilities	0.77	0.73	0.5
Wholesale	0.7	0.67	0.53
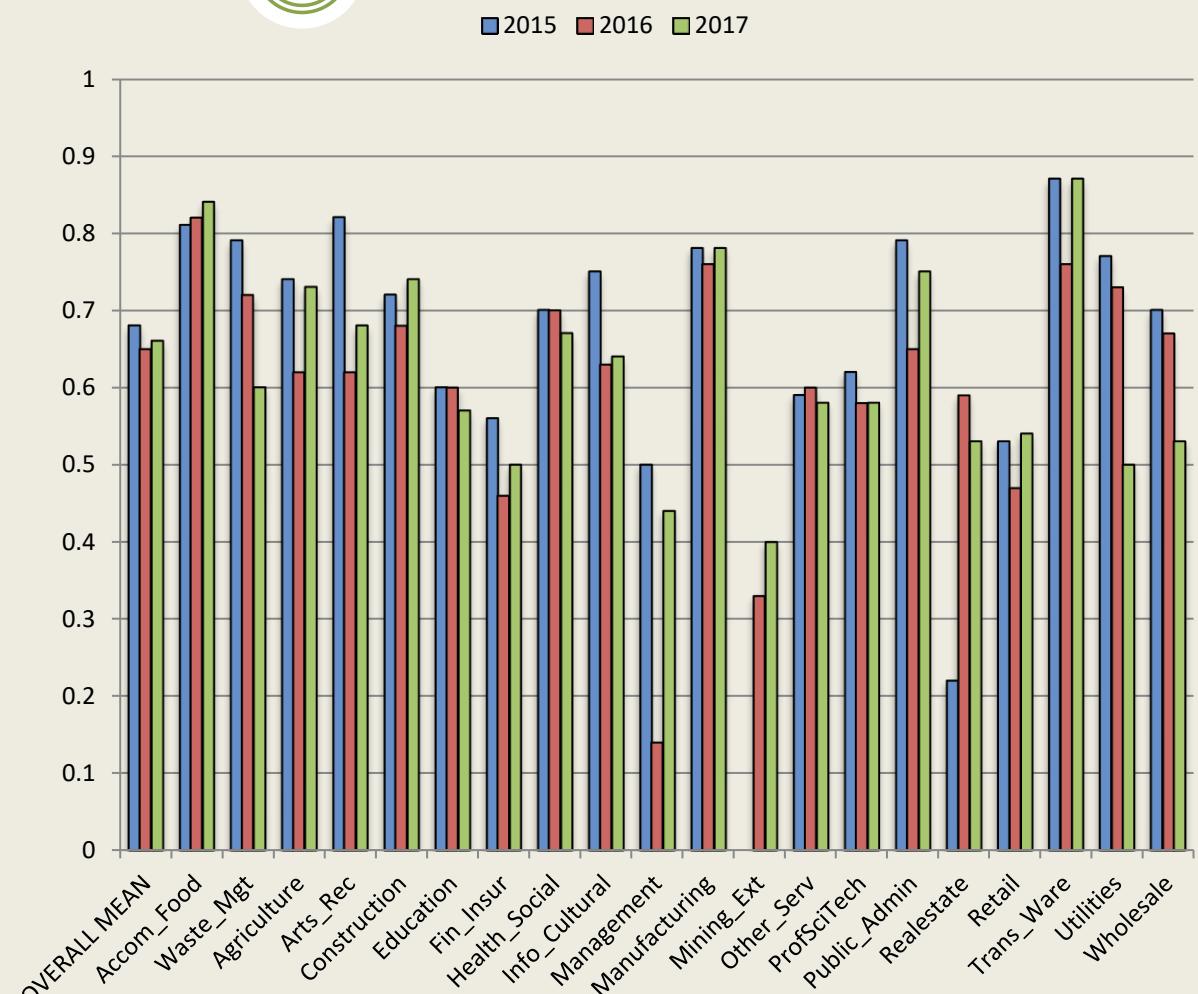
Was your organization able to provide or support on-going training and education opportunities for your employees last year? Analysis by Industry

	2015	2016	2017
OVERALL MEAN	**0.79**	**0.76**	0.71
Accom_Food	0.65	0.65	0.62
Waste_Mgt	0.77	0.72	0.77
Agriculture	0.76	0.61	0.66
Arts_Rec	0.66	0.77	0.59
Construction	0.7	0.77	0.75
Education	0.89	0.86	0.87
Fin_Insur	0.88	0.9	0.8
Health_Social	0.92	0.9	0.77
Info_Cultural	0.87	0.69	0.7
Management	0.8	0.83	0.75
Manufacturing	0.83	0.5	0.77
Mining_Ext			0.6
Other_Serv	0.78	0.74	0.68
ProfSciTech	0.78	0.74	0.73
Public_Admin	0.97	0.95	0.89
Realestate	0.38	0.67	0.57
Retail	0.66	0.63	0.56
Trans_Ware	0.86	0.82	0.74
Utilities	0.92	0.77	0.71
Wholesale	0.78	0.72	0.64
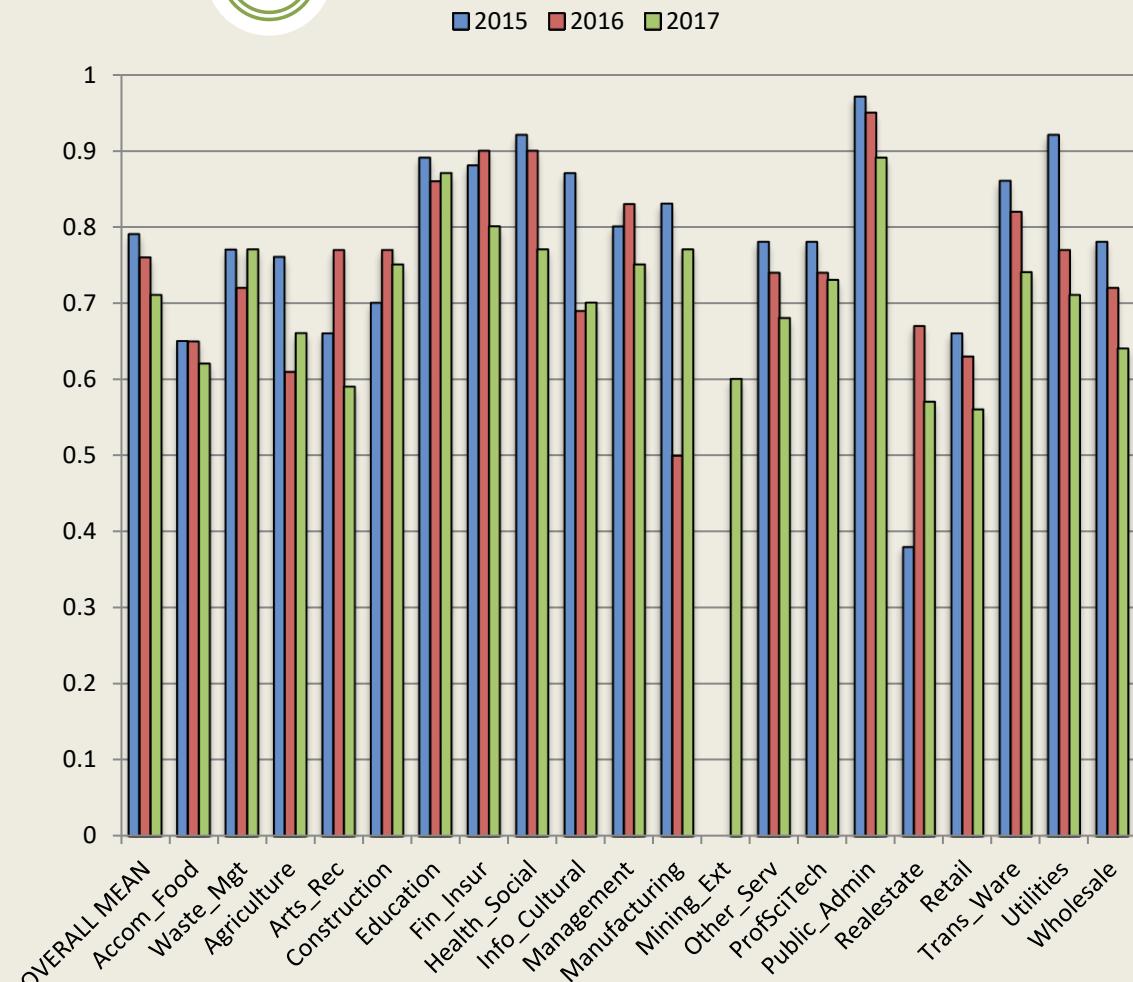
Correlations – 2015/2016/2017 comparison

	Total Emp	Separation	Hire	Recruit Agency	Hard to fill	Plan Hire
Total Emp						
Separation	↑.10 to .11 to .13					
Hire	↑.08 to .08 to .11	.45 to .44 to .46				
Recruit agency	↑.07 to .09 to .18	.12 to .20 to .17	.15 to .16			
Hard to fill	↑.01 to .06 to .11	↑.11 to .32 to .36	.35 to 31	↑.15 to .21 to .25		
Plan to hire	↑.09 to .09 to .12	↑.25 to .27 to .33	↑.34 to .34 to .37	↑.07 to .14 to .17	↑.22 to .34 to .36	
Training	↑.06 to.07 to .08	.15 to .20 to .18	↑.17 to .19 to .31	.01 to .13 to .11	↑.02 to .08 to .17	↑.09 to .12 to .19

(All coefficients are significant $p < 0.01$)

2017 Data
Higher or Lower than Average?

	Total Emp	Separ-ation	Hire	Agency	Hard to fill	Plan Hire	Support Training
BruceGrey HuronPerth	↓	↓	↓	↓	↑	↓	↓
Chatham Kent	↓	↑	↓	↑	↓	↓	↓
Hamilton	↑	↓	↑	↑	↓	↑	↓
Elgin Middlesex Oxford	↑	↑	↑	↓	↑	↑	↑
GrandErie	↓	↓	↑	↓	↓	↓	↑
WWD	↑	↑	↑	↑	↑	↑	↑
Niagara	↓	↓	↑	↓	↓	↓	↑
Windsor Essex		↓	↓		↓	↓	
Sarnia Lambton	↓	↑	↓	↓	↓	↓	↓

Good (+) or Bad (-) News?
2017 data

	Total Emp	Separation	Hire	Agency	Hard to fill	Plan Hire	Support Training
BruceGrey HuronPerth	-	+	-	+	-	-	-
ChathamKent	-	-	-	-	+	-	-
Hamilton	+	+	+	-	+	+	-
Elgin Middlesex Oxford	+	-	+	+	-	+	+
GrandErie	-	+	+	+	+	-	-
WWD	+	-	+	-	-	+	+
Niagara	-	+	+	+	+	-	+
Windsor Essex		+	-		+	-	
Sarnia Lambton	-	-	-	+	+	-	-

Going Forward

- Please cite with permission

- Questions?
  - Email smann@uoguelph.ca or chowhan@mcmaster.ca