

# KENTUCKY BOARD *of* EMERGENCY MEDICAL SERVICES

Kentucky EMS  
Attrition Survey

2016

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# KBEMS 2016 ATTRITION SURVEY

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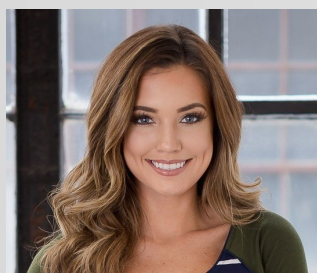
# KBEMS 2016 ATTRITION SURVEY



## *Introduction*



**Paul Phillips, Principle Investigator**  
**Director of Field Operations**



**Monica Robertson, Sub-Investigator**  
**Applications Data Coordinator**

## **Abstract**

### **Background**

In 2016, Kentucky EMS employee attrition increased 5%; from 16% in 2015 to 21%. The Kentucky EMS employee turnover rate is 2% higher than the national employee attrition average (Society for Human Resource Management, 2016). Undoubtedly, there is a significant need to assemble baseline data to understand why Kentucky EMS providers are deciding to leave the field of EMS.

### **Purpose Statement**

This report presents the findings of KBEMS' 2016 Attrition Survey; the primary objective of this study is to determine the trends and other factors that contribute to Kentucky EMS employee attrition.

### **Method**

In 2017, the Kentucky Board of Emergency Medical Services conducted a survey of EMS providers who allowed their license/certification to expire the previous year. The 17-question survey was administered to 1,523 previously active providers by means of email. There were 199 participants (15.88% response rate), including 141 (71%) Males and 58 (29%) Females. The survey contained several demographic questions along with a 5-point-likert scale measuring provider perceptions and attitudes. The data was analyzed using statistical software SPSS; descriptive statistics, Chi-Square, and ANOVA analyses were used to interpret the results.

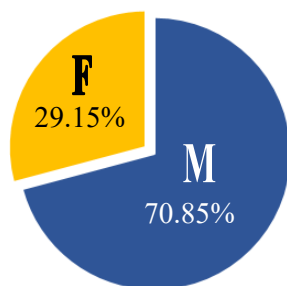
# KBEMS 2016 ATTRITION SURVEY



## Participant Demographics

N = 199 (Study Participants)

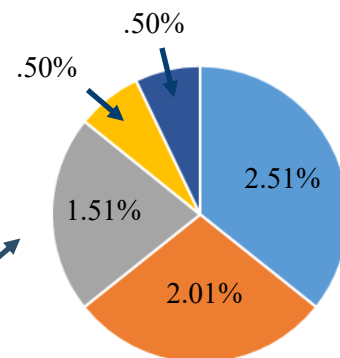
### Gender



M= 141      F= 58

### Race / Ethnicity

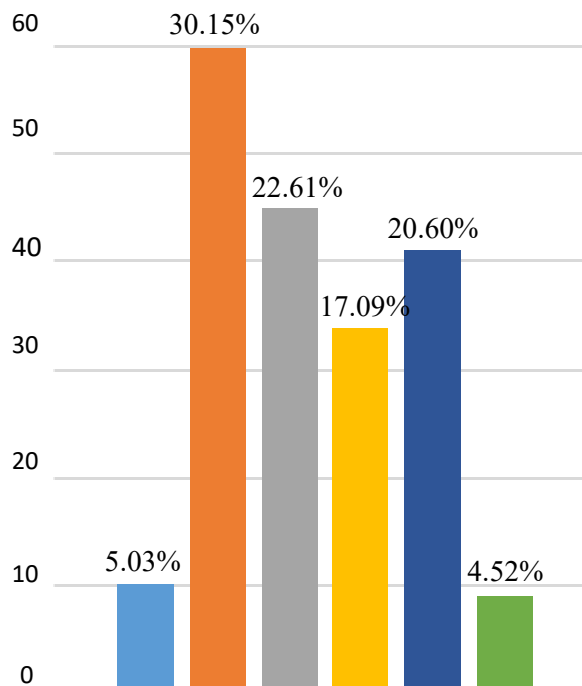
Race	%
White; Non-Hispanic	92.96%
Decline to Respond	2.51%
American Indian or Alaskan	2.01%
Asian or Pacific Islander	1.51%
Black; Non-Hispanic	0.50%
Hispanic	0.50%



### Age Range

Age Range	Count	%
18 - 24 years	10	5.03%
25 - 34 years	60	30.15%
35 - 44 years	45	22.61%
45 - 54 years	34	17.09%
55 - 64 years	41	20.60%
65+ years	9	4.52%

The average age of study participants falls within the age range of 35 - 44 years.



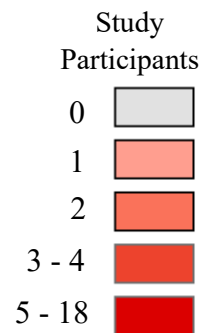
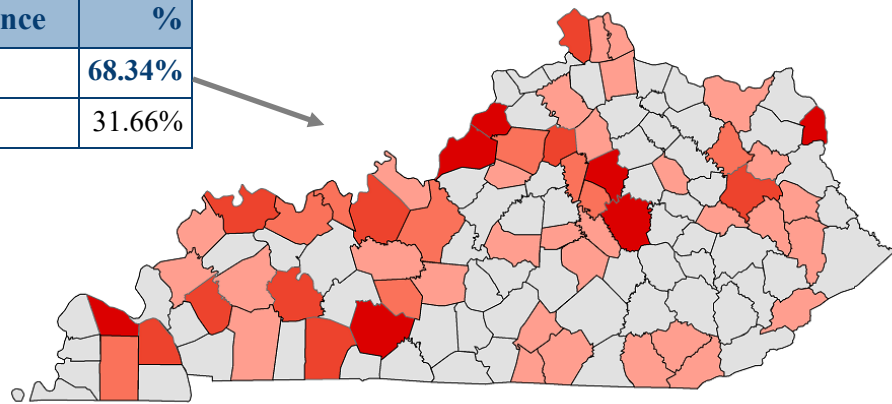
# KBEMS 2016 ATTRITION SURVEY



## Participant Demographics

### Number of Participants by County

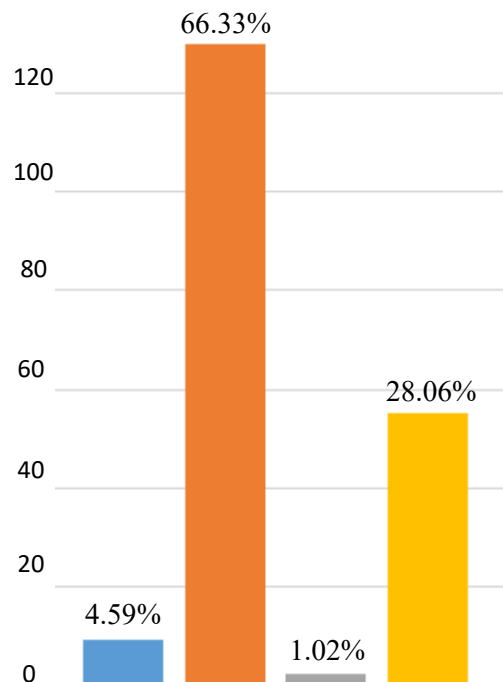
State Residence	%
Kentucky	68.34%
Out of State	31.66%



### Participant License/Certification Level

License / Certification Level	Count	%
Emergency Medical Responder (EMR)	9	4.59%
Emergency Medical Technician (EMT)	130	66.33%
Advanced Emergency Medical Technician (AEMT)	2	1.02%
Paramedic	55	28.06%

Total 2016 KY Expired Providers	
EMR-58	EMT-976
AEMT-1	Paramedic-236



# KBEMS 2016 ATTRITION SURVEY



## Participant Demographics

### Formal Education

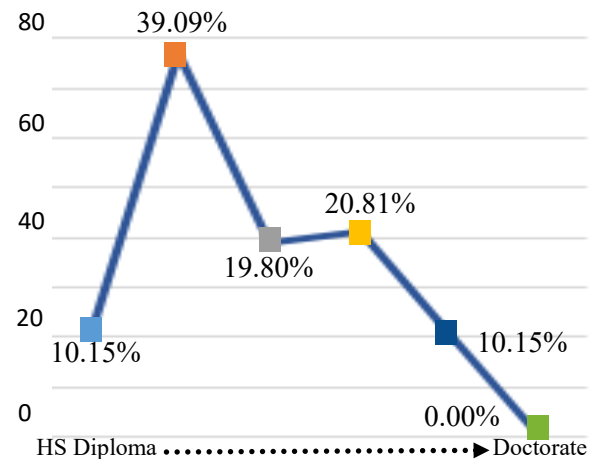
Education	Count	%
High School Diploma	20	10.15%
Some College	77	39.09%
Associate's Degree	39	19.80%
Bachelor's Degree	41	20.81%
Master's Degree	20	10.15%
Doctorate	0	0.00%

**Kentucky's Educational Attainment National Rankings according to the US Census Bureau:**

45th - High School Diploma Rates

47th - Bachelor's Degree Rates

36th - Advanced Degree Rates



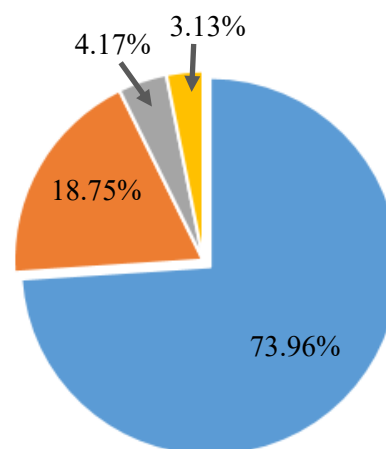
### Kentucky Resident Educational Attainment

High School Diploma: 84.2%	Bachelor's Degree: 22.3%	Advanced Degree: 9.2%
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### NREMT (National Registry of Emergency Medical Technicians)

NREMT Status	Count
Not Maintaining License/Certification	142
Another state only	8
NREMT and other state (s)	36
NREMT only	6

NREMT Status	Count
Active	38
Inactive	5



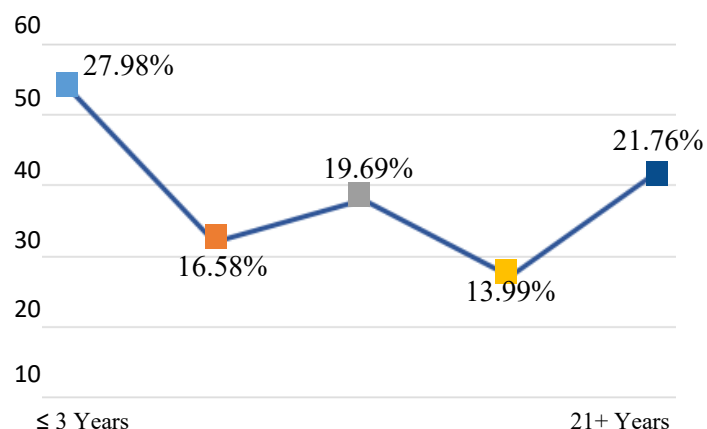
# KBEMS 2016 ATTRITION SURVEY



## Participant Demographics

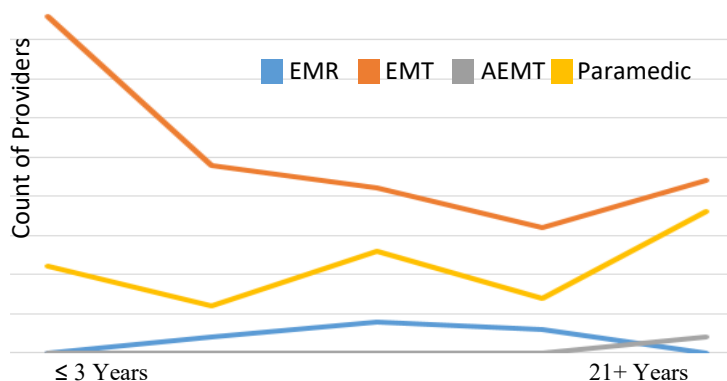
### Provider Length of Service in EMS

Length of Service	Count	%
1 - 3 Years	54	27.98%
4 - 9 Years	32	16.58%
10 - 15 Years	38	19.69%
16 - 20 Years	27	13.99%
21+ Years	42	21.76%



### Positive Significant Correlation

There is a moderate positive correlation between Length of Service and Provider Certification/License Level; that is, the more advanced the provider level is the stronger the likelihood of an extended length of service ( $r=.177, p = .014$ ).



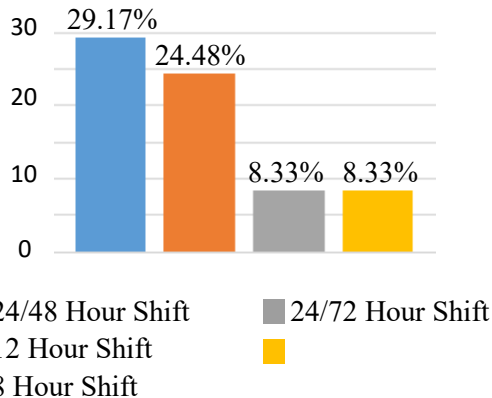
Cross-Tabulation	Length of Service				
Provider Level	1-3 Years	4-9 Years	10-15 Years	16-20 Years	21+ Years
EMR	0	2	4	3	0
EMT	43	24	21	16	22
AEMT	0	0	0	0	2
Paramedic	11	6	13	7	18

# KBEMS 2016 ATTRITION SURVEY



## Most Recent EMS Employment

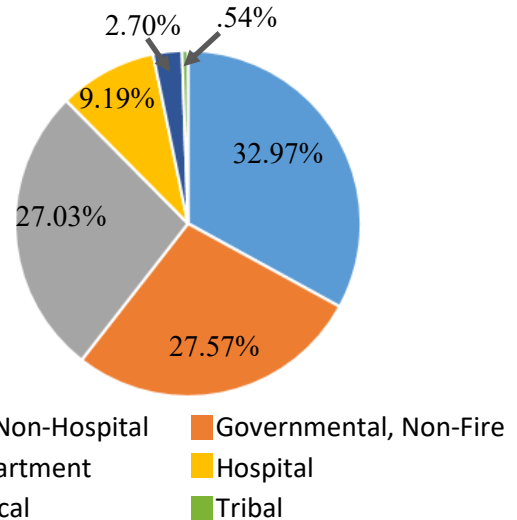
### Work Schedule



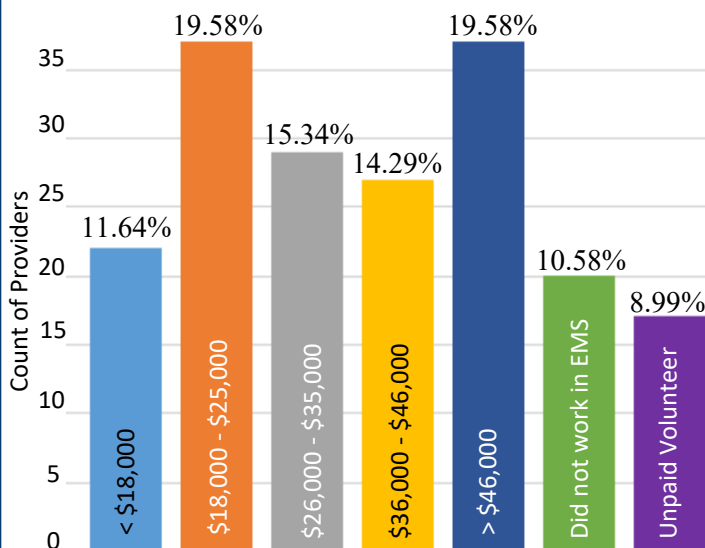
**Additional 29.69%:**

17.71% Did not work in EMS; 11.98% Other (Volunteer, Part-Time, On-Call, 24/16, Varied)

### Organization Type



### Annual Salary



**According to the US Census Bureau:**

Kentucky is ranked 45th nationally by per capita income.

Annual Salary	Count	%
Less than \$18,000	22	11.64%
\$18,000 - \$25,000	37	19.58%
\$26,000 - \$35,000	29	15.34%
\$36,000 - \$46,000	27	14.29%
More than \$46,000	37	19.58%
Did not work in EMS	20	10.58%
Unpaid Volunteer	17	8.99%

**57.89%** of participants (excluding those who did not work in EMS & volunteers) earned less than \$36,000 annually working as an EMS Provider. The national median per capita income in the US is \$41,520.



# KBEMS 2016 ATTRITION SURVEY



## Perceptions & Attitudes

For the following nine statements respondents were offered a choice of five pre-coded responses:

(1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, & (5) Strongly Agree

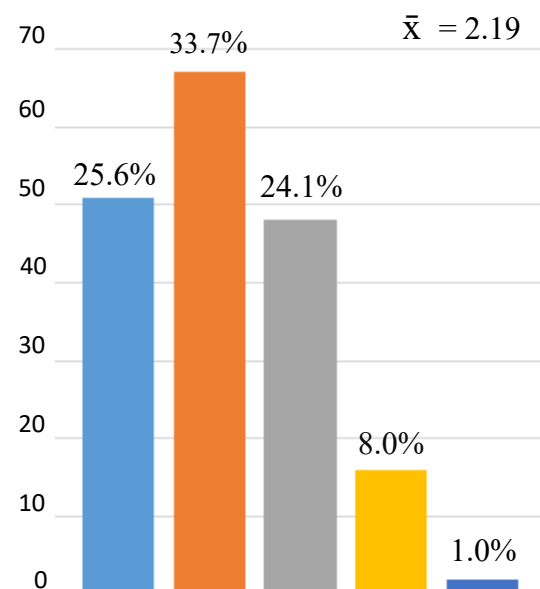
These questions were meant to measure study participant's perceptions, attitude, and opinions regarding EMS:

- Job Compensation / Benefits Package
- Workplace Satisfaction
- Traumatic Workplace Stress
- Work Schedule / Flexibility

When responding to the statements, respondents specified their level of agreement or disagreement on a symmetric agree-disagree scale. Thus, the range captured the intensity of their feelings for each given statement.

**I believe that most EMS providers receive an excellent benefits package (health insurance, retirement plan, etc.)**

Valid		Frequency	Percent
	1.Strongly Disagree	51	25.6%
	2.Disagree	67	33.7%
	3.Neutral	48	24.1%
	4.Agree	16	8.0%
	5.Strongly Agree	2	1.0%
	Total	184	92.5%
Missing	System	15	7.5%
Total		199	100.0%



### Significant Correlation:

Participants who believe that most EMS providers receive an excellent benefits package are more likely to agree that working as an EMS provider is a rewarding and meaningful career ( $r = .210, p = .004$ ).

# KBEMS 2016 ATTRITION SURVEY

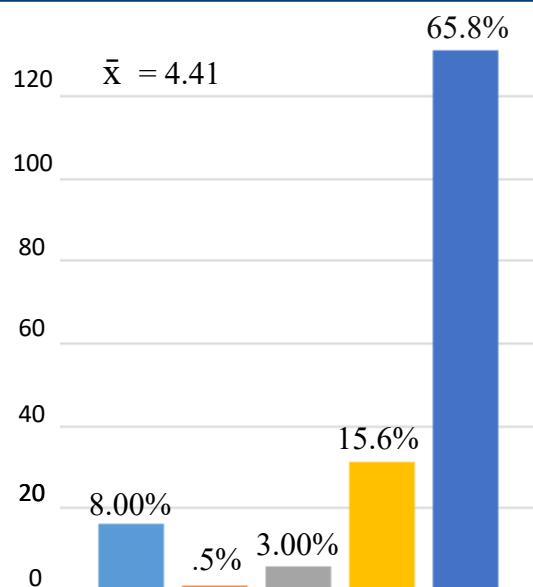
## Perceptions & Attitudes



### I believe that EMS providers deserve a higher annual salary.

Valid		Frequency	Percent
	1.Strongly Disagree	16	8.0%
	2.Disagree	1	.5%
	3.Neutral	6	3.0%
	4.Agree	31	15.6%
	5.Strongly Agree	131	65.8%
	Total	185	93.0%
Missing	System	14	7.0%
Total		199	100.0%

**8 out of 10 participants (81.4%)** believe that EMS providers deserve a higher annual salary, while only 8.5% believe that EMS providers do not deserve a higher annual salary.

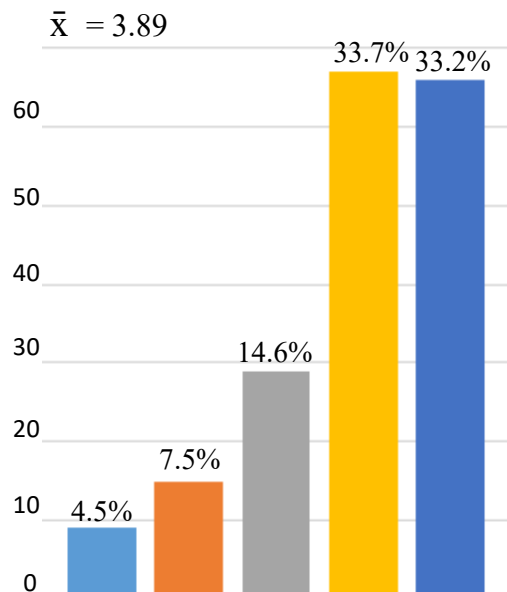


### Working as an EMS provider is a rewarding and meaningful career.

Valid		Frequency	Percent
	1.Strongly Disagree	9	4.5%
	2.Disagree	15	7.5%
	3.Neutral	29	14.6%
	4.Agree	67	33.7%
	5.Strongly Agree	66	33.2%
	Total	186	93.5%
Missing	System	13	6.5%
Total		199	100.0%

#### Significant Positive Correlation:

Participants who believe that working as an EMS provider is a rewarding career are more likely to recommend that their friend take a job in EMS ( $r = .482, p = .000$ .)



# KBEMS 2016 ATTRITION SURVEY

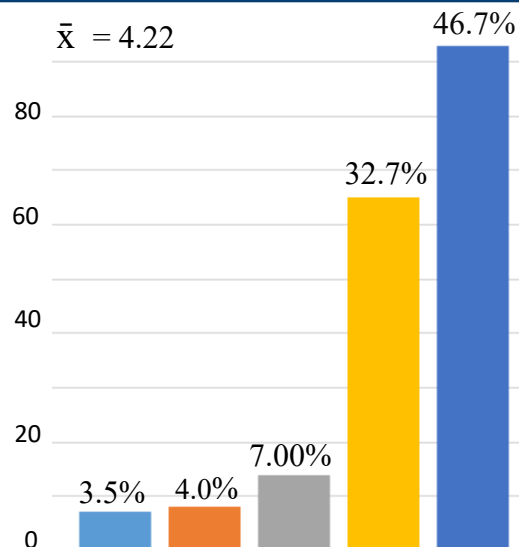
## Perceptions & Attitudes



**I believe that EMS providers are exposed to more personally disturbing incidents than other health care workers.**

Valid		Frequency	Percent
	1.Strongly Disagree	7	3.5%
	2.Disagree	8	4.0%
	3.Neutral	14	7.0%
	4.Agree	65	32.7%
	5.Strongly Agree	93	46.7%
	Total	187	94.0%
Missing	System	12	6.0%
Total		199	100.0%

Only **7.5%** of participants do not believe that EMS providers are exposed to more personally disturbing incidents than other health care workers.

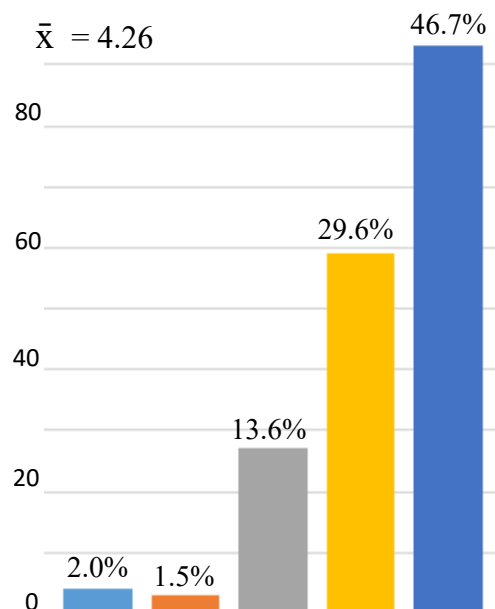


**I believe that working as an EMS provider is highly stressful.**

Valid		Frequency	Percent
	1.Strongly Disagree	4	2.0%
	2.Disagree	3	1.5%
	3.Neutral	27	13.6%
	4.Agree	59	29.6%
	5.Strongly Agree	93	46.7%
	Total	186	93.5%
Missing	System	13	6.5%
Total		199	100.0%

### Significant Correlation:

Participants who believe that EMS providers deserve a higher annual salary tend to also believe that working as an EMS provider is highly stressful ( $r=.208$ ,  $p=.005$ ).



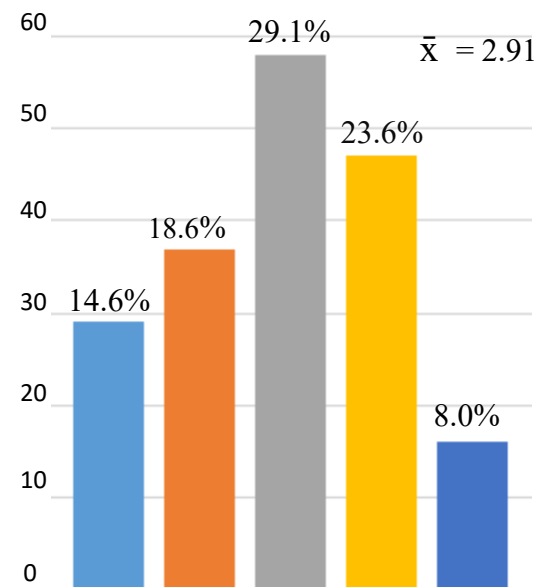
# KBEMS 2016 ATTRITION SURVEY



## Perceptions & Attitudes

### If a friend asked me, I would recommend that they take a job in EMS.

Valid		Frequency	Percent
	1.Strongly Disagree	29	14.6%
	2.Disagree	37	18.6%
	3.Neutral	58	29.1%
	4.Agree	47	23.6%
	5.Strongly Agree	16	8.0%
	Total	187	94.0%
Missing	System	12	6.0%
Total		199	100.0%

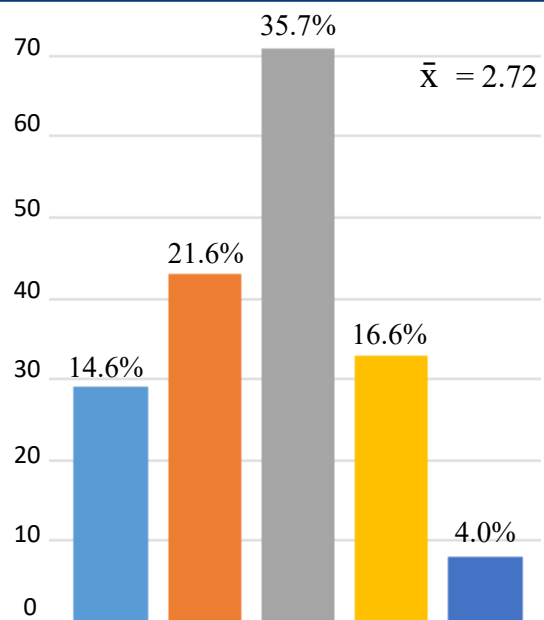


#### Significant Correlation:

Participants who would recommend that their friend take a job in EMS are also more likely to believe that there are plenty of opportunities for advancement ( $r = .482, p = .000$ ).

### EMS Providers have access to flexible work schedules.

Valid		Frequency	Percent
	1.Strongly Disagree	29	14.6%
	2.Disagree	43	21.6%
	3.Neutral	71	35.7%
	4.Agree	33	16.6%
	5.Strongly Agree	8	4.0%
	Total	184	92.5%
Missing	System	15	7.5%
Total		199	100.0%



#### Only 1 out of 5 Participants (20.6%)

Believe that EMS providers have access to flexible work schedules.

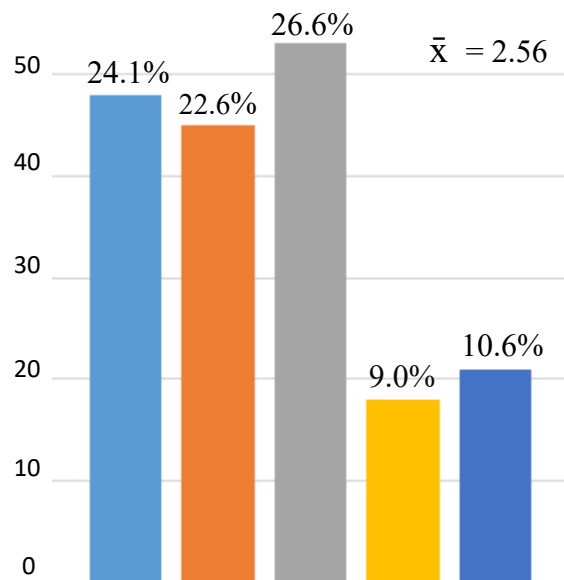
# KBEMS 2016 ATTRITION SURVEY



## Perceptions & Attitudes

### I will more than likely reinstate my EMS license.

Valid		Frequency	Percent
	1.Strongly Disagree	48	24.1%
	2.Disagree	45	22.6%
	3.Neutral	53	26.6%
	4.Agree	18	9.0%
	5.Strongly Agree	21	10.6%
	Total	185	93.0%
Missing	System	14	7.0%
Total		199	100.0%

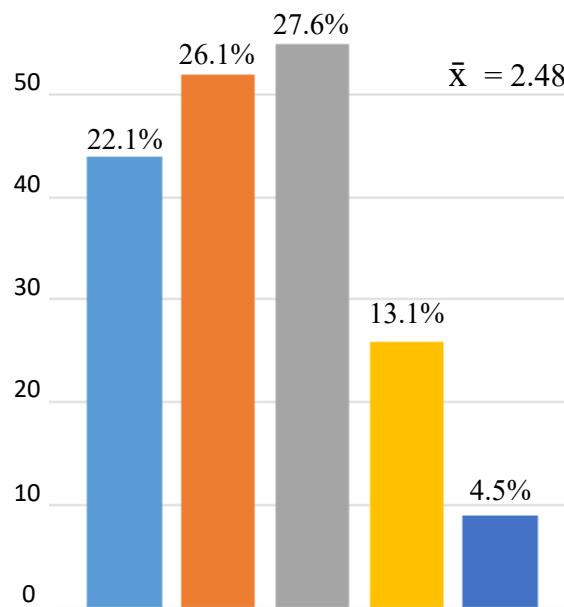


#### Significant Correlation:

Younger participants are more likely to reinstate their KY EMS license/certification as opposed to older participants ( $r = -.297, p = .000$ ).

### There are plenty of opportunities for advancement in the EMS field.

Valid		Frequency	Percent
	1.Strongly Disagree	44	22.1%
	2.Disagree	52	26.1%
	3.Neutral	55	27.6%
	4.Agree	26	13.1%
	5.Strongly Agree	9	4.5%
	Total	186	93.5%
Missing	System	13	6.5%
Total		199	100%



#### Significant Correlation:

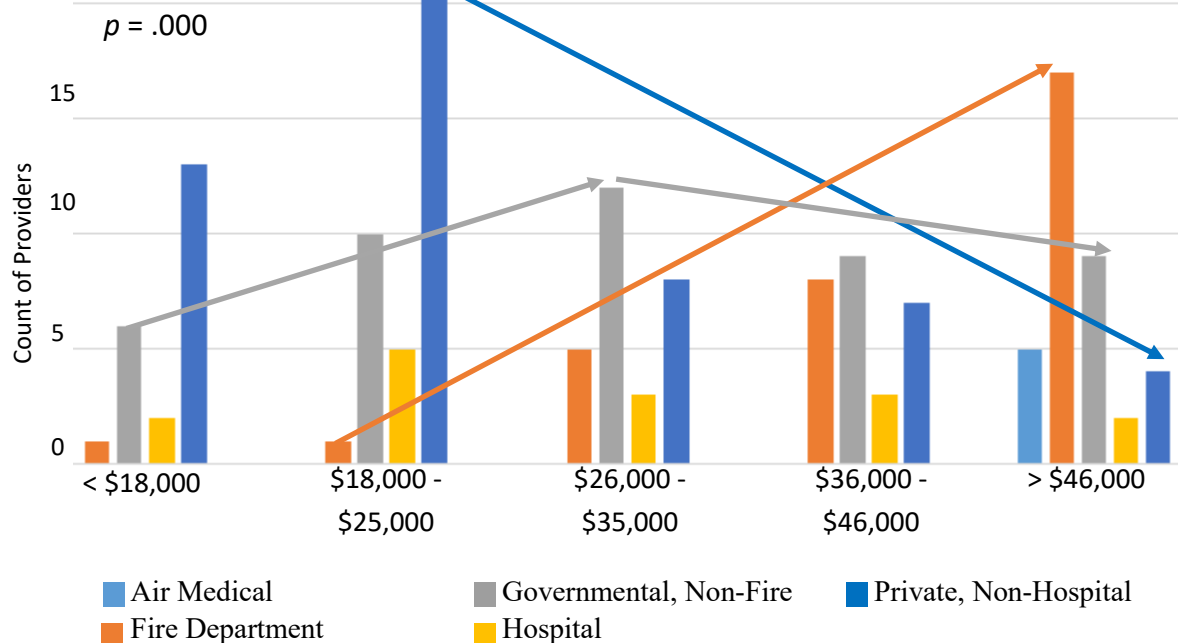
Between those who believe that there are plenty of opportunities for advancement and certification/license level ( $r = -.200, p = .006$ ). Only 11.11% of Paramedics believe there are plenty of opportunities for advancement in the EMS field.

# KBEMS 2016 ATTRITION SURVEY



## Significant Correlations

### Annual Salary / Type of Organization

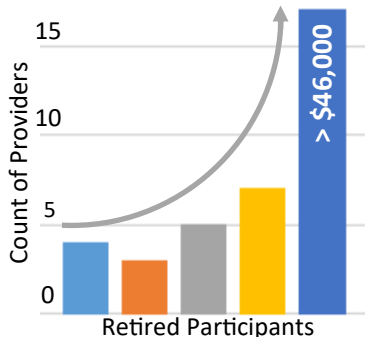


### Annual Salary / Retired

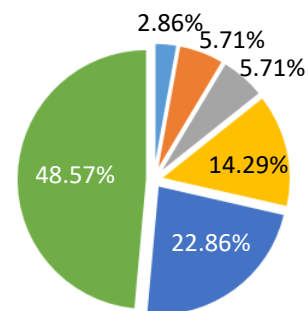
<span style="color: blue;">■</span> < \$18,000	<span style="color: orange;">■</span> \$18,000 - \$25,000
<span style="color: grey;">■</span> \$26,000 - \$35,000	<span style="color: yellow;">■</span> \$36,000 - \$46,000
<span style="color: blue;">■</span> > \$46,000	

**66.67%** of participants that retired from EMS earned an annual salary greater than \$35,000 at their most recent EMS workplace.

$p = .000$



<span style="color: blue;">■</span> Work Injury
<span style="color: orange;">■</span> External Factors
<span style="color: grey;">■</span> Low Salary
<span style="color: yellow;">■</span> Poor Management
<span style="color: blue;">■</span> Relocated
<span style="color: green;">■</span> Retired



Of those participants who earned more than \$46,000 annually....

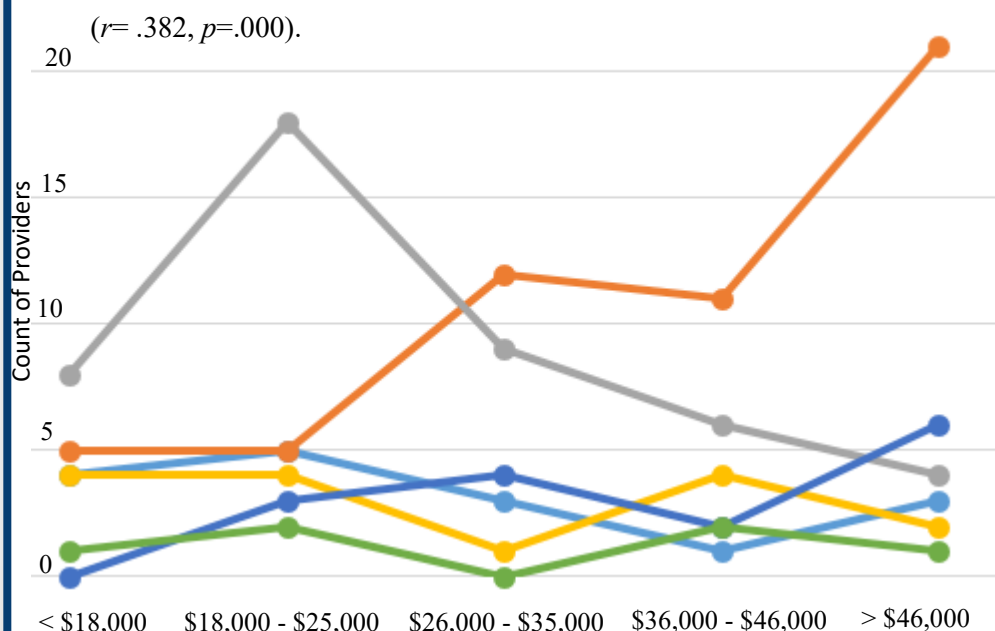
**48.57%** retired from EMS, while **31.43%** allocated leaving the field of EMS due to either external factors, relocation, or work injury.

# KBEMS 2016 ATTRITION SURVEY

## Significant Correlations



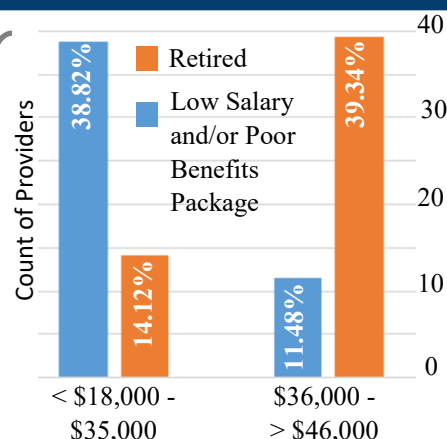
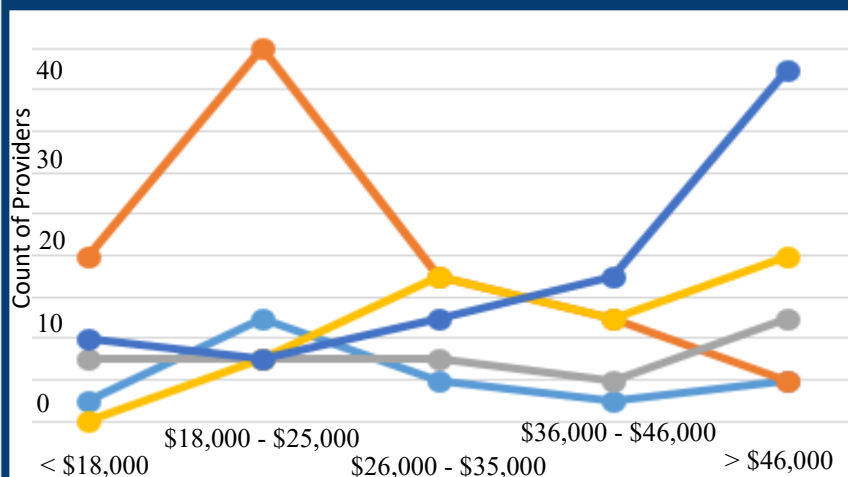
### Annual Salary / Shift Schedule



Shift Schedule	
<span style="color: orange;">■</span>	24/48 Hour
<span style="color: grey;">■</span>	12 Hour
<span style="color: yellow;">■</span>	8 Hour
<span style="color: blue;">■</span>	24/72 Hour
<span style="color: lightblue;">■</span>	Other
<span style="color: green;">■</span>	Did not work in

56.76% of Participants who made over \$46,000 at their most recent EMS workplace did so while working a 24/48 Hour Shift.

### Annual Salary / Top 5 Primary Reasons for Allowing License/Certification to Expire



38.82% of those who earned less than \$36,000 annually claimed that Low Salary and/or Poor Benefits was their primary reason for leaving EMS ( $r = .144, p = .053$ ).

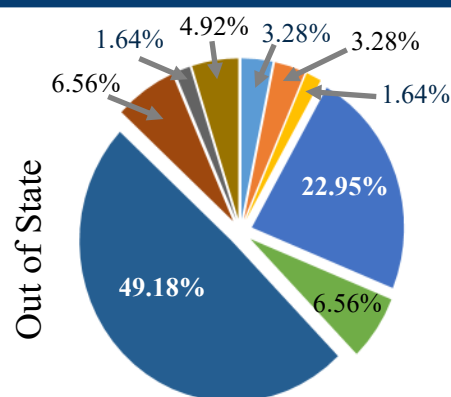
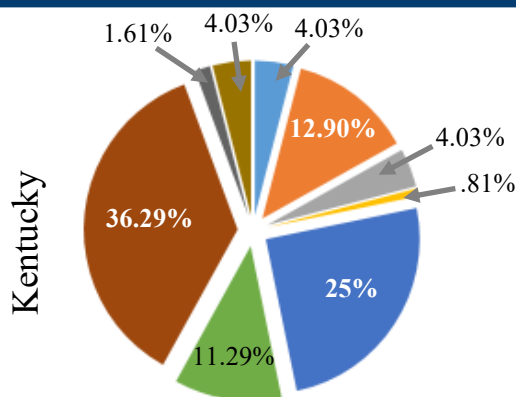


# KBEMS 2016 ATTRITION SURVEY



## Significant Correlations

### Residence / Primary Reason for Allowing EMS License/Certification to Expire



( $r = .100$ ,  $p = .175$ ).

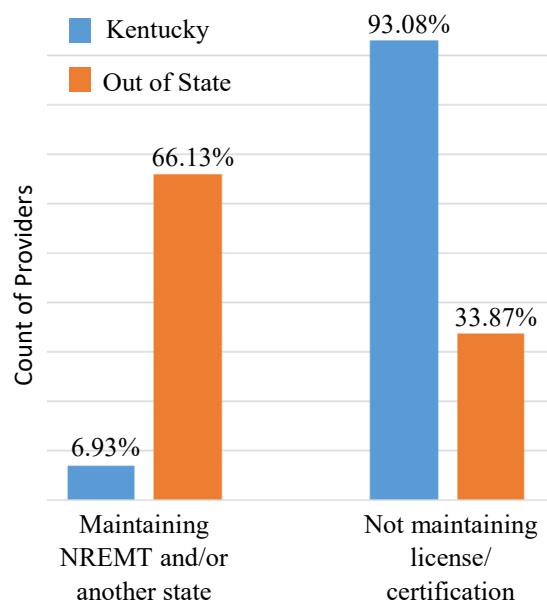
Work Injury	Inflexible Work Schedule	Low Salary and/or Poor Benefits Package	Retired	Simply did not enjoy working in EMS
External Factors; not my choice to leave EMS	Lack of Promotion Opportunities	Poor Management and/or Hostile Work Environment	Relocated	Unable to find a full-time position

### Residence / NREMT Status

Cross-Tabulation	Kentucky	Out of State
NREMT Only	1.54%	6.45%
NREMT and other state	3.85%	50.00%
Another state only	1.54%	9.68%
Not maintaining license / certification	93.08%	33.87%

#### Significant Correlation:

Participants who live out of state are more likely to maintain certification with NREMT and/or another state ( $r = .177$ ,  $p = .014$ ). Suggestively, these individuals are likely working as EMS providers within another state.



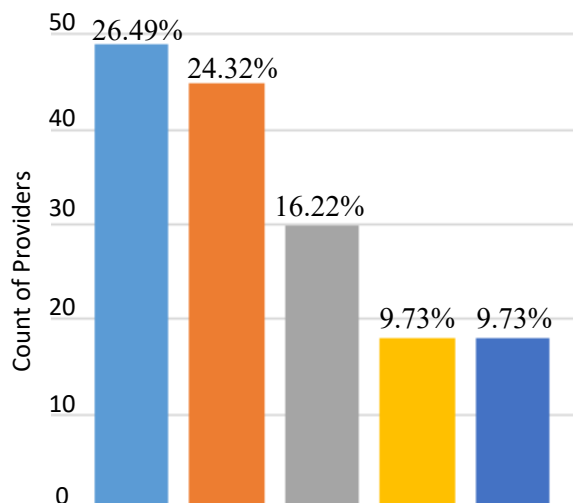


# KBEMS 2016 ATTRITION SURVEY



## Significant Correlations

### Top 5 Primary Reasons for Allowing EMS License/Certification to Expire



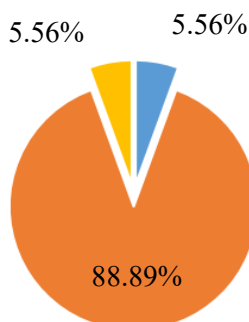
Top 5 Primary Reasons	Count	%
Retired	49	26.49%
Low Salary and/or Poor Benefits Package	45	24.32%
Relocated	30	16.22%
External Factors; Not my Choice to Leave EMS	18	9.73%
Poor Management and/or Hostile Work Environment	18	9.73%

**Additional 13.51%:** Unable to Find a Full-Time Position (4.32%), Work Injury (3.78%), Inflexible Work Schedule (2.70%), Simply did not Enjoy Working in EMS (1.62%), & Lack of Promotion Opportunities (1.08%).

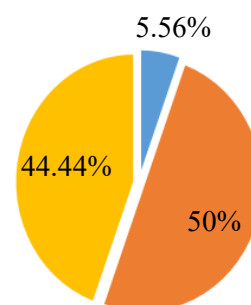
### Significant Correlations

The following graphs display the significant provider level correlations associated with study participants who indicated that 'External Factors; Not my Choice to Leave EMS' or 'Poor Management and/or Hostile Work Environment' was the primary reason for allowing their EMS License/Certification to expire (see chart above).

Primary Reason: 'External Factors; Not my Choice to Leave EMS'



Primary Reason: 'Poor Management and/or Hostile Work Environment'



EMR	EMT	AEMT	Paramedic
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# KBEMS 2016 ATTRITION SURVEY

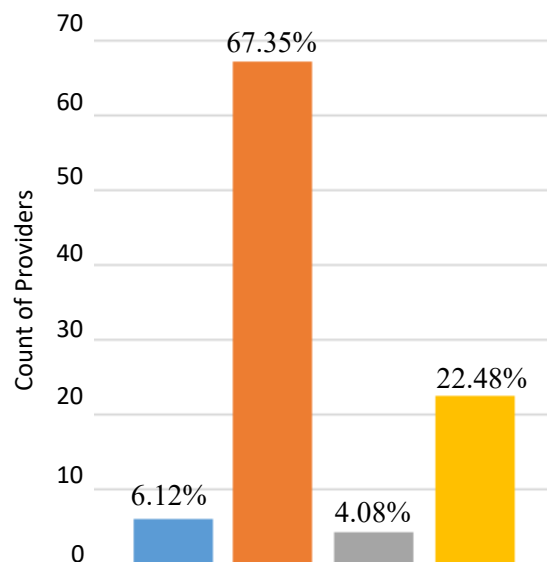


## Significant Correlations

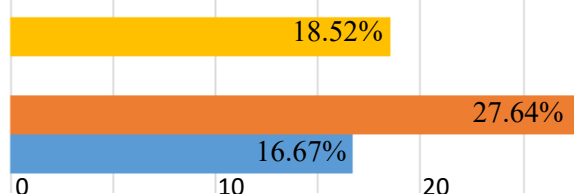
### Provider Level / Retirement

Provider Level	Retirement Count	%
EMR	3	6.12%
EMT	33	67.35%
AEMT	2	4.08%
Paramedic	11	22.48%

Of those study participants who retired from EMS **67.35%** were EMTs, however, this number only accounts for **26.83%** of all EMT participants. Instead, a slightly larger majority of EMTs accounted low annual salary as their primary reason for leaving EMS (**27.64%**). See chart below.

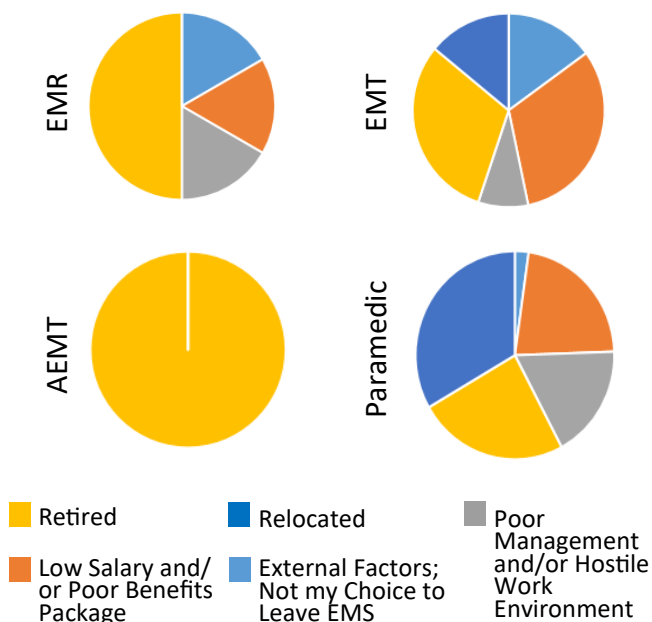


### Provider Level / Primary Reason for Leaving EMS



Study participants who selected 'Low Salary and/or Poor Benefits Package' as their primary reason for leaving EMS, examined by License/Certification Level.

Provider Level	Count	%
EMR	1	16.67%
EMT	34	27.64%
AEMT	0	0%
Paramedic	10	18.52%



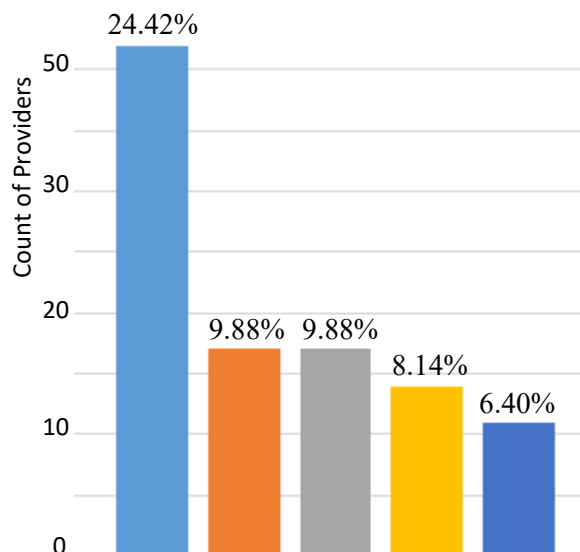
# KBEMS 2016 ATTRITION SURVEY



## Significant Correlations

### Top 5 New Career Fields

Top 5 New Career Fields	Count	%
Health & Medicine	42	24.42%
Fire	17	9.88%
Self-Employed	17	9.88%
Transportation	14	8.14%
Government	11	6.40%



**Additional 41.28%:** Education & Teaching (5.81%), Homemaker (5.23%), Manufacturing (4.65%), Construction (4.07%), Student (4.07%), Agriculture (3.49%), Engineering & Computer Science (2.91%), Law & Public Policy (2.91%), Finance & Insurance (2.33%), Business & Economics (1.74%), Sales (1.74%), Arts & Entertainment (.58%), Communications & Media (.58%), Hospitality, Tourism, & Food Service (.58%), Research & Development (.58%)

### Significant Findings

Of those who are still working within the 'Health & Medicine' field **51.28%** strongly agree that EMS providers are exposed to more personally disturbing incidents than other health care workers.

**36.59%** of those who are still working within the 'Health & Medicine' field only worked within Emergency Medical Services for 1 - 3 years.

**13.93%** of male participants now work within the field of 'fire', while **0%** of female participants work within the field of 'fire'.

**81.25%** of study participants who are now working within the field of 'Fire' previously worked as an EMS provider at a Fire Department.

# KBEMS 2016 ATTRITION SURVEY



## *Key Findings*

**The 2016 KBEMS Attrition Study was able to identify statistically significant demographic, EMS work life characteristics, and perception variables that predicted Kentucky EMS Attrition. The following are the key findings of the study.**

### **Retired**

According to survey results, retirement is the number one primary reason for employee attrition among Kentucky EMS providers. Furthermore, it is important to distinguish that of those who retired from EMS 66.67% earned towards the upper end of the EMS pay scale, making greater than \$35,000 annually.

### **Low Salary and/or Poor Benefits Package**

The overall noteworthy trend among the data, is that across all demographics there is one commonality, the belief that EMS providers deserve a higher annual salary and better benefits (81.4%). Only 33.87% of study participants earned an annual salary more than \$35,000; roughly \$6,000 less than the national median capita income level.

### **Relocated**

31.66% of study participants no longer live or work within Kentucky and 66.13% of these participants indicated that they are currently maintaining NREMT and/or another state's certification. Inferring that these individuals are working as EMS providers for out of state agencies.

### **Provider Level**

Provider license/certification level is correlated to several motivating factors: length of service, compensation, and attitude towards EMS. Ultimately, Paramedics are more likely to experience an increased level of job satisfaction as compared to AEMTs, EMTs, and EMRs.

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