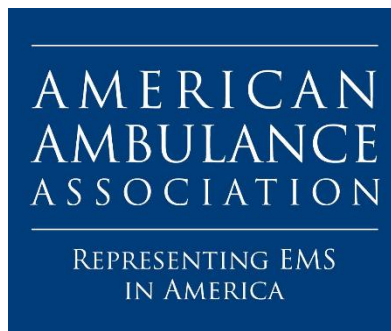


AAA/Avesta 2019 Ambulance Industry Employee Turnover Study



Prepared and authored by Avesta Systems, Inc. and the
American Ambulance Association

July 2019

CONFIDENTIAL

Table of Contents

Abstract and Media Summary	4
Executive Summary.....	5
Introduction and Purpose	10
Turnover: Definitions and National Statistics	10
Definitions	10
National Statistics and Past Reports on EMS Turnover	11
2018 AAA/Avesta Ambulance Industry Study.....	12
Estimated Price of Turnover	12
Design of Study	13
Occupations Included	13
Questions Asked	14
Cleaning and Computation of Data.....	14
Descriptions of Organizations	14
Results for Full-Time EMTs.....	17
Turnover Rates (48 Organizations)	17
Reasons for Involuntary Turnover	17
Reasons for Voluntary Turnover.....	18
Estimated Price of Turnover	19
Results for Part-Time EMTs.....	20
Turnover Rates (42 Organizations)	20
Reasons for Involuntary Turnover	20
Reasons for Voluntary Turnover	21
Results for Full-Time Paramedics.....	22
Turnover Rates (46 Organizations)	22
Reasons for Involuntary Turnover	22
Reasons for Voluntary Turnover	23
Estimated Price of Turnover	24
Results for Part-Time Paramedics.....	25
Turnover Rates (36 Organizations)	25
Reasons for Involuntary Turnover	26
Reasons for Voluntary Turnover	27
Results for Supervisors.....	28
Turnover Rates (54 Organizations)	28

Reasons for Involuntary Turnover	28
Reasons for Voluntary Turnover	29
Results for Dispatch Employees	30
Turnover Rates (30 Organizations)	30
Reasons for Involuntary Turnover	30
Reasons for Voluntary Turnover	31
Results for Billing Office Employees.....	32
Turnover Rates (42 Organizations)	32
Reasons for Involuntary Turnover	32
Reasons for Voluntary Turnover	33
Results for Wheelchair Vehicle Operators.....	34
Turnover Rates (17 Organizations)	34
Reasons for Involuntary Turnover	34
Reasons for Voluntary Turnover	35
Turnover Rates by Sector, Organization Size and Other Factors	36
Predictors of Turnover Rate 36	
Time with Organization Before the Turnover Event.....	37
Supplemental or Alternative Weighted Analysis	38
Avesta Research on Turnover From the Employee Perspective.....	38
Appendix A. Letter for Turnover Survey	43
Appendix B. AAA / Avesta 2019 Ambulance Industry Employee Turnover Study: Word Version of Qualtrics 2019	45

Abstract and Media Summary

The American Ambulance Association (AAA) and Avesta Systems, Inc. joined forces to conduct the second annual survey of employee turnover in the EMS industry. Turnover estimates are presented for the following positions:

- Full-time EMTs
- Part-time EMTs
- Full-time paramedics
- Part-time paramedics
- Supervisors
- Dispatch employees
- Billing office employees
- Wheelchair vehicle operators

This survey corresponded with 15,967 employees working at 54 EMS organizations.

Considering America's current economy and last year's projected increase, the rates for voluntary turnover are not surprising. Voluntary and overall turnover remained in the 20 to 30 percent range for full-time EMTs and paramedics. However, there was an increase in involuntary turnover. Regardless, the estimated price of turnover for full-time EMTs and paramedics was \$6,411.12 and \$7,728.82 each, respectively.

Executive Summary

Employee turnover, involuntary and voluntary, is perhaps one of the most critical issues impacting ambulance service providers due to its numerous negative consequences. This report contains the results of a survey conducted by the American Ambulance Association (AAA) and Avesta Systems, Inc., with technical support and assistance provided by The Center for Organizational Research at The University of Akron and Doverspike Consulting LLC.¹

Avesta and the AAA designed this second annual survey to collect and analyze employee turnover data for the Emergency Medical Services (EMS) industry. The first survey was completed in 2018.²

The process involved sending an internet survey link to 700 organizations. Usable responses were received from 54 EMS organizations, but not every organization reported data for every listed job.³

The survey included questions for people employed in the following EMS occupations:

- Full-time EMTs
- Part-time EMTs
- Full-time paramedics
- Part-time paramedics
- Supervisors
- Dispatch employees
- Billing office employees
- Wheelchair vehicle operators

People completing the survey were asked questions about voluntary and involuntary turnover for each occupation. They were also asked about the reasons for turnover.⁴ Additionally, the survey included questions new for 2019 that led to its conclusions regarding the turnover cost for full-time EMTs and paramedics, as well as EMS organizations' annual lost revenue due to staffing shortages.

EMS employee turnover *means calculations* were calculated in two ways, as unweighted and weighted turnover averages. For most of the analyses, the survey team calculated *means* by giving all surveyed organizations an equal weight in calculating the average.

¹ We would also like to thank Scott Moore, of Moore EMS Consulting LLC.

² The results from the first survey were described by Avesta Systems and the American Ambulance Association (2018). *AAA/Avesta 2018 Ambulance Industry Employee Turnover Study*. Published by authors.

³ Partial responses were received from 66 organizations. However, due to the smaller number of organizations responding, we applied strict rules for identifying outliers. As a result, data from 12 organizations were not used in the reported analysis.

⁴ For definitions of voluntary and involuntary turnover, see the body of the report.

This was the primary method because it allowed for other analyses that treated organizations as individual cases in statistical analyses. Although there are several reasons for preferring this analysis, a strong argument could be made that it has a notable disadvantage: an analysis calculated on only larger organizations would result in more stable estimates.

The survey team also conducted an alternative weighted average analysis, with the turnover statistics for an organization being weighted by the job category headcount before calculating the average turnover. Table ES1 contains the 2018 and 2019 weighted and unweighted average turnover rates by occupation or job title category. For easy comparison, the 2018 results appear in parentheses below the 2019 percentages.

With a few notable exceptions, such as supervisors, the turnover rates were higher than the estimate for all EMS occupations in the U.S. Supervisors had the lowest rates of overall, voluntary and involuntary turnover. Conversely, part-time EMTs and wheelchair vehicle operators had the highest overall and voluntary turnover rates. Additionally, billing office employees and part-time EMTs had the highest involuntary turnover rates — and these employee groups showed large increases in reported turnover compared to 2018. There was also a large increase in overall turnover compared to 2018 for dispatch. More in-depth analysis of the survey results indicated there was a wide range of turnover rates within and across different job categories.

Table ES1. Turnover Rates by Year by Occupational Category (2018 Results Appear in Parentheses Below the 2019 Results)⁵

Occupation	Unweighted Average Turnover			Weighted Average Turnover		
	Overall Turnover ^a	Voluntary Turnover	Involuntary Turnover	Overall Turnover	Voluntary Turnover	Involuntary Turnover
Full-time EMT	30% (25%)	24% (18%)	5% (4%)	28% (24%)	22% (19%)	6% (4%)
Part-time EMT	44% (30%)	30% (27%)	12% (3%)	47% (31%)	29% (27%)	18% (3%)
Full-time Paramedic	22% (24%)	19% (21%)	4% (3%)	19% (17%)	16% (14%)	4% (3%)
Part-time Paramedic	28% (30%)	24% (28%)	5% (1%)	37% (29%)	24% (26%)	13% (2%)
Supervisor	12% (15%)	9% (9%)	3% (4%)	8% (9%)	6% (6%)	2% (2%)
Dispatch	36% (23%)	23% (16%)	11% (8%)	31% (21%)	20% (16%)	11% (5%)
Billing Office	26% (10%)	11% (6%)	14% (2%)	27% (16%)	18% (11%)	8% (4%)

⁵ Given the number of organizations, the reported percentages would have a margin of error of around 5 percentage points.

Wheelchair Vehicle	39% (50%)	30% (23%)	10% (15%)	34% (37%)	23% (24%)	10% (9%)
All U.S. Occupations	20%	15%	5%	20%	15%	5%

^aNote, voluntary and involuntary turnover do not add up to equal overall turnover because they are an average or mean across all organizations. Some organizations reported overall separations but not voluntary and involuntary separations.

The involuntary turnover rate was much higher in 2019 than in 2018 for part-time EMTs, which resulted in an increase in the overall turnover rate.⁶ Overall turnover for employees working in EMS dispatch centers and in EMS billing offices also increased. For part-time paramedics, the weighted results indicated an increase in overall and involuntary turnover.

Despite increases from 2018 to 2019, the rate of involuntary turnover remains low. However, the increase in its rate is concerning.

Given the economy and the projections of increased voluntary turnover, the rates are not a surprise. Voluntary and overall turnover were in the 20 to 30 percent range for EMTs and paramedics. With percentages that high, organizations are looking at replacing most of their workforces within a four-year period. In other words, over a four-year period there will be 100 percent turnover. Also, at a national level, turnover has been trending upward since 2008.

The voluntary turnover rates should remain an area of concern. Since EMTs and paramedics are on the front lines, delivering healthcare services to clients and patients, the high rate of voluntary turnover for these jobs is a critical issue, as is the high rate of overall turnover. This is especially true of part-time EMTs and paramedics.

Across job titles, the most frequently listed reason for voluntary termination was a career change, followed by dissatisfaction with pay, while for some jobs it was a return to school. Poor performance was listed most frequently as the reason for involuntary turnover.

⁶ This result for part-time EMT was partially due to a large number of involuntary turnovers for one large organization.

For 2018, data was collected on the estimated price⁷ of turnover. The survey showed the following:

- Mean price to recruit or attract a full-time EMT: \$948.77
- Mean price to select and screen a full-time EMT: \$531.32
- Mean total price to onboard and train a full-time EMT: \$4,931.03
- **Estimated mean price of turnover for a full-time EMT: \$6,411.12**
- Mean price to recruit or attract a full-time paramedic: \$1,376.00
- Mean price to select and screen a full-time paramedic: \$763.06
- Mean total price to onboard and train a full-time paramedic: \$5,589
- **Estimated mean price of turnover for a full-time paramedic: \$7,728.82**

As a result, the total estimated price of turnover for one year:

- For an organization with 100 EMTs: \$192,333.60⁸
- For an organization with 100 paramedics: \$170,034.04⁹

Avesta has been conducting research on turnover in the ambulance industry and has also been attempting to build models of turnover that can lead to actionable recommendations.

Based on surveys of the relationship between employee attitudes and intentions to leave an organization, the factors found to consistently relate to possible turnover include:

- Pay
- Communications — transparency with supervisors and management
- Fairness exhibited by supervisors and managers
- Performance management
- Work-life balance and experienced stress

The problem still lies in identifying actionable solutions. It is difficult to do much about increasing pay, given limited budgets and fairly flat organizations. One possibility is to implement organizational interventions that are associated with psychologically healthy workplaces, such as:

- Increased attention to employee health and safety
- Introducing programs to allow for career growth and development outside of traditional career ladders
- Scheduling to allow for increased work-life balance
- Increased employee involvement

⁷ The term *estimated price* is used instead of *cost*, as it seems unlikely that organizations in the ambulance industry can accurately estimate the true cost of turnover but are instead reflecting what they pay or the price charged for services related to replacing employees.

⁸ Based on 30 EMTs leaving during the year.

⁹ Based on 22 Paramedics leaving during the year.

Another possibility is to continue to look for methods of improving recruitment, selection and hiring.

Introduction and Purpose

Controlling employee turnover is a major human resource challenge for any organization, especially for those in healthcare. The development of effective strategies for the management of turnover requires the availability of reliable and valid data on turnover frequency. However, existing data on turnover for the ambulance industry is sparse and inconsistent.

EMS agencies around the U.S. are struggling with an unprecedented shortage of qualified candidates to fill a growing number of vacancies. The U.S. Bureau of Labor Statistics (BLS) projected a 15 percent increase in demand for EMS personnel from 2016 to 2026, which was significantly faster growth than the average of all other occupations.¹⁰ As a result, EMS organizations are being challenged by the growing costs of turnover.

The AAA, Avesta, and its affiliates are working to understand the underlying causes of turnover and develop strategies to address them. Employee turnover and the flipside of the coin, employee retention, have been identified by AAA members as two of the most critical issues facing ambulance service providers today.

The second annual *AAA/Avesta Ambulance Industry Employee Turnover Study* was designed for the purpose of yielding information that EMS organizations need to identify and benchmark their turnover challenges. The hope is that the results of this study will help shape strategies that can be used to attract potential EMS workers or retain those already working in the profession. In addition, this year's survey was designed to help validate the critical staffing challenges faced by the ambulance industry with a better understanding of the cost of turnover. As an industry, we must identify the scope and dynamics of this problem so we can begin to offer solutions to the human resource challenges the industry faces.

Turnover: Definitions and National Statistics

Definitions¹¹

One of the biggest problems with addressing the issue of turnover is the lack of reliable and valid data, as well as the differences in the definition of turnover. For this report, we have followed what we believe to be best practices, in that we have offered a specific definition of turnover. The definitions used were as follows:

Separations: The total number of individuals in the job category that left the organization in 2018.

¹⁰ BLS, *Occupational Outlook Handbook, EMTs and Paramedics*, <https://www.bls.gov/ooh/healthcare/emts-and-paramedics.htm>

¹¹ One of the issues in tracking turnover is that there are a number of equally valid methods for measuring turnover. In selecting a method, we needed to arrive at definitions and an approach that would be easy for responding organizations.

Headcount: The number of filled plus open positions for each job category at the end of 2018. Filled positions refer to the number of employees in each job category that were on the payroll at the end of 2018.

Total Turnover Rate: The number of total separations for each job category divided by the corresponding headcount.

Voluntary Turnover Rate: The number of voluntary separations for each job category divided by the corresponding headcount.

Involuntary Turnover Rate: The number of involuntary separations for each job category divided by the corresponding headcount.

National Statistics and Past Reports on EMS Turnover

Several agencies provide data on turnover for all occupations in the U.S., as well as industry breakdowns. For 2018, the BLS estimated an overall turnover rate across all industries of 44.3 percent, which has been trending upward, and a rate for healthcare of 33.0 percent.¹² For 2019, the projected rate was 43.2 percent for estimated overall turnover, with a voluntary turnover rate of 32.4 percent.¹³ For healthcare, the projected rate was 30.0 percent for overall turnover, with a voluntary turnover rate of 24.0 percent. Also worth noting is that while traditionally turnover was split evenly between voluntary and involuntary, BLS recent results suggest about two-thirds of turnover is voluntary (64 percent), while about 31 percent is involuntary.¹⁴

Other organizations have also provided recent estimates. Many of these are much lower than the BLS reports. Mercer provided estimates of 22 percent overall, with 16 percent for voluntary.¹⁵ Shaker International reported a voluntary turnover rate of 27 percent for 2018. For 2016, Compensation Force reported a much lower turnover rate for all occupations of 17.8 percent, with a rate of 19.9 percent for healthcare,¹⁶ about 75 percent of which is voluntary.¹⁷ In 2018, SHRM reported a turnover rate of 18 percent for all occupations, with 77 percent being voluntary.¹⁸ Based on multiple reports, we can make an estimate of around 20 percent for turnover overall, 15 percent of which is voluntary.

¹² BLS, *Table 16. Annual total separations rates by industry and region, not seasonally adjusted*, <https://www.bls.gov/news.release/jolts.t16.htm>

¹³ BLS, *Job Opening and Labor Turnover Summary*, <https://www.bls.gov/news.release/jolts.nr0.htm>

¹⁴ Ibid. 8.

¹⁵ <https://www.imercer.com/content/article/employee-turnover.aspx>

¹⁶ Shaker International (2019). *2019 Quarterly Business Impact Brief: Turnover*, author.

¹⁷ *Compensation Force: 2016 Turnover Rates by Industry*, <http://www.compensationforce.com/2017/04/>

¹⁸ SHRM, *2017 Human Capital Benchmarking Report*, <https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/Documents/2017-Human-Capital-Benchmarking.pdf>

From the national statistics, we can conclude turnover is trending upward for the economy as a whole, and there is less involuntary turnover and more voluntary turnover. The unemployment rate also hit a new low of 3.6 percent in April 2019.

Turnover for healthcare is similar to that for occupations as a whole. However, this available data is somewhat inconsistent and not specific to ambulance services.

As reported by various news sources, including EMS.com News, there was a dispute in 2016 over the national average for turnover.¹⁹ The turnover rate at the AMR agency was 23 percent, according to the union. The union argued that was twice the national average, although where it obtained the national average data is unknown. AMR reported a much lower local turnover rate, and suggested the union was misrepresenting data.

2018 AAA/Avesta Ambulance Industry Study

In 2018, the first *AAA/Avesta Ambulance Industry Employee Turnover Study* generated the largest response to a turnover study ever published for the private EMS industry. Altogether, a total of 119 representatives of organizations across the nation completed the survey for one or more job categories.

In general, involuntary turnover rates were relatively low across jobs, ranging from 1 to 8 percent, with the exception of wheelchair vehicle operators at 15 percent. The results for voluntary and overall turnover were more concerning, with both EMTs and paramedics having turnover rates in the 20 to 30 percent range. Further analysis revealed that sector was the best predictor of turnover, with higher rates in private sector organizations than public sector organizations. Additionally, the results suggest the lower turnover rate in the public sector was not due to higher pay.

Estimated Price of Turnover

Very little data was available on the price or cost of turnover in the ambulance industry. As with turnover itself, the calculation of the price or cost of turnover is complicated by a range of definitions and calculation methods. For example, some measures seem to capture only the price of hiring a replacement. Others include the price of hiring a replacement plus onboarding. Furthermore, in the ambulance industry, the argument could be made that losing an EMS employee would result in lost billings or revenue. So, coming up with a single number for the cost of turnover is not easily accomplished and for that reason we refer to the “estimated price” of turnover.

¹⁹ EMS1.com News, *Union in dispute with city, EMS agency over high turnover rate*, Mar 31, 2016, <https://www.ems1.com/ems-management/articles/76932048-Union-in-dispute-with-city-EMS-agency-over-high-turnover-rate/>

A 2010 research article in *Prehospital Emergency Care* by Patterson and associates involved a longitudinal study of turnover in EMS.²⁰ The study used a convenience sample of 40 EMS agencies. The overall weighted mean annual rate of turnover was reported to be 10.2 percent, with a median turnover cost of \$71,613.75 (for the agency). They also reported on another study of turnover that provided figures of 15 and 23 percent for full- and part-time employees, respectively. There are a number of problems with generalizing from this article, as it included all staff as well as all volunteer organizations. However, the reported median cost per termination was \$6,871.57 or \$7,000. Adjusting for inflation, this would give a cost of turnover based on Patterson of around \$8,000 for each termination event.

Estimates available for the workforce in general range from a cost of hire of around 5 percent up to a turnover cost of anywhere from 50 to 100 percent of salary. The most realistic estimate is probably that given by the U.S. Department of Labor, which sets the cost of turnover at 16 percent of the average salary. Given an average salary of between \$40,000 and \$50,000 for EMTs or paramedics, this would equate to an average cost for a termination event of between \$6,400 and \$8,000.

In this year's study, data was collected on the estimated price of turnover. The term *estimated price* was used instead of *cost*, as it seemed unlikely that ambulance services could accurately estimate the true cost of turnover, but were instead reflecting what they pay or the price charged for services related to replacing employees.

Design of Study

The project began with the identification of a need for information on turnover, retention and costs of turnover in the ambulance industry. To collect data, staff at the Center for Organizational Research²¹ constructed a turnover survey using the Qualtrics survey platform. A letter was then drafted by the AAA and sent to its members, and additional participants received an invitation from Avesta.²² A total of 700 organizations were offered the chance to participate. The data was collected between March 7 and April 27 in 2019.

Occupations Included

The following job categories were included in the study:

- Full-time EMTs
- Part-time EMTs
- Full-time Paramedics

²⁰ Patterson, P. D., Jones, C. B., Hubble, M. W., Carr, M., Weaver, M. D., Engberg, J., & Castle, N. (2010). The longitudinal study of turnover and the cost of turnover in emergency medical services. *Prehospital Emergency Care*, 14(2), 209-221.

²¹ COR staff included Dennis Doverspike, Director, Ketaki Sodhi, Graduate Student Coordinator, Alexandra Petruzzelli, Consultant, Julie Chen, Consultant, and Russell Steiner, Consultant.

²² A copy of the letter appears in Appendix A. A copy of the survey appears in Appendix B; note, much of the formatting of the computerized version was lost in the conversion to Word for use in this document.

- Part-time Paramedics
- Supervisors
- Dispatch Employees
- Billing Office Employees
- Wheelchair Vehicle Operators

Questions Asked

Respondents were asked to report headcount (filled and open positions), total separations, voluntary separations, and involuntary separations for each of the job categories in their organization for 2018. Not all organizations responded for every job category. Additionally, data was collected on the costs associated with turnover in terms of recruiting, screening, and training for full-time EMTs and paramedics. Also, data was collected on the type and size of organization, the reasons for turnover, and lost revenue due to staff shortages.²³

Cleaning and Computation of Data

The data was cleaned prior to the analysis, which was conducted in Excel and SPSS. Fractions were rounded off to whole numbers. Any unusual or out of range numbers were eliminated.

Study principals did not try to estimate or correct for respondents who only answered the overall separations questions but did not provide complete data on voluntary and involuntary separations. Voluntary and involuntary turnover do not add up to equal overall turnover because they are an average or mean across all organizations. Some organizations reported overall separations but not voluntary and involuntary separations; thus, for some organizations, calculations could only be determined for overall turnover, not voluntary or involuntary turnover.²⁴ In other cases, the number of voluntary and involuntary separations did not equal the number of total separations; however, these numbers were taken as they were received. After cleaning the data, the turnover rates were computed based on the definition previously provided.

Descriptions of Organizations

Partial responses were received from 66 organizations. However, due to the smaller number of organizations responding, we applied strict rules for identifying outliers. As a result, data from 12 organizations was not included in the final, reported analysis. The resulting analyses were based on 54 organizations that did provide usable data.

Of those individuals completing the survey, the majority indicated their position in the organization was as a president, CEO, or owner (26 percent); Human Resources (HR) manager (24 percent) or executive in a department other than HR (19 percent). The

²³ For all questions, see the survey in Appendix B.

²⁴ This is not unusual but occurs with other surveys including those carried out by BLS.

remaining individuals reported being HR clerks or assistants (11 percent), HR executives (11 percent), managers in a department other than HR (2 percent), or a job title that was not listed (7 percent).

There was a diverse set of organizations represented in this study with regard to what sectors they were in, where they provide services, and the size of the organization. (See Table 1). Twenty-one organizations (or 39 percent of our respondents) were in the Private Sector — For Profit; 16 organizations (30 percent) were in the Private Sector — Not for Profit or Nonprofit; 15 organizations (28 percent) were in the Public Sector — Standalone EMS; one organization (2 percent) was in the Public Sector — Fire Department; and one organization (2 percent) identified as belonging to a sector that was not listed. In comparison to 2018, there was a higher percentage of private for profit organizations, and correspondingly, a smaller percentage of public sector organizations.

1. Type of Organizations

Type of Organization	Number	Percentage
Private – for Profit	21	39%
Private – Not for Profit	16	30%
Public Sector – Standalone	15	28%
Public Sector – Fire Dept.	1	2%
Other	1	2%
Total	54	100% ²⁵

Across these various sectors, organizations reported providing services in the Midwest (30 percent), Northeast (26 percent), South and Southeast not including Texas (20 percent), Texas (9 percent), Southwest (7 percent), or the West and Rocky Mountain (15 percent) regions. Two responding organizations reported providing services to more than one region. (See Table 2.) Compared to 2018, there was a higher percentage of organizations from the West or Rocky Mountains, and a smaller percentage from the Northeast.

Table 2. Regions of the Country

Regions of the Country	Number	Percentage
Midwest	16	30%
Northeast	14	26%
South and Southeast	11	20%
Texas	5	9%
Southwest	4	7%
West or Rocky Mountains	8	15%
Total ^a	54	107%

^a Some organizations were in more than one region.

²⁵ Due to rounding, the numbers actually add up to more than 100%.

Additionally, the majority of responding organizations had less than 500 total employees, with 37 percent reporting a range of 1 – 99 employees, 28 percent with a range of 100 – 199, and 22 percent with a range of 200 – 499. Of the remaining organizations, 9 percent reported a range of 500 – 799 employees and 4 percent reported more than 800 employees. (See Table 3.) Compared to 2018, there was a large percentage drop in the percentage of employers with less than 100 employees.

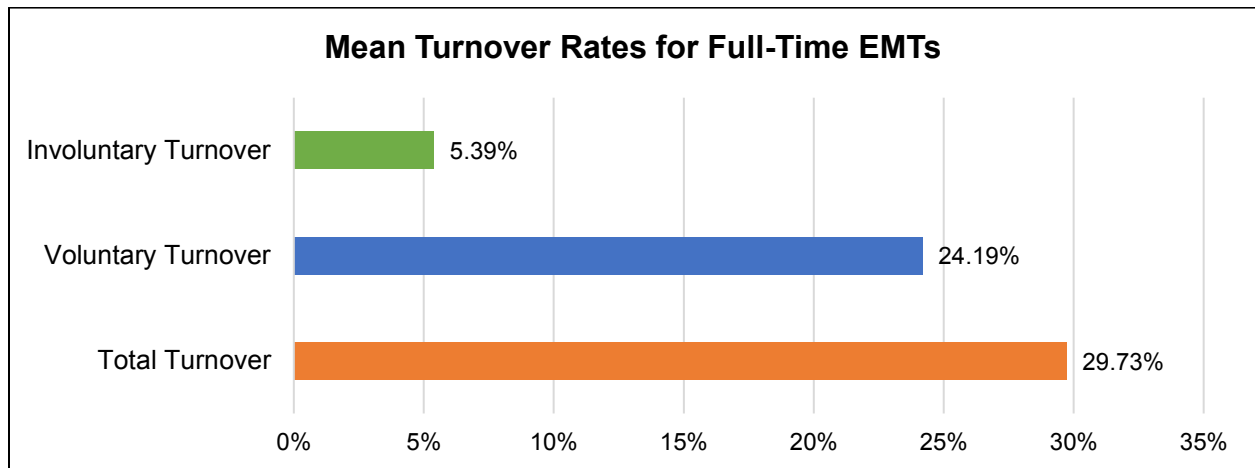
Table 3. Number of Employees

Number of Employees	Number	Percentage
1 – 99	20	37%
100 – 199	15	28%
200 – 499	12	22%
500 – 799	5	9%
800+	2	4%
Total	54	100%

Results for Full-Time EMTs

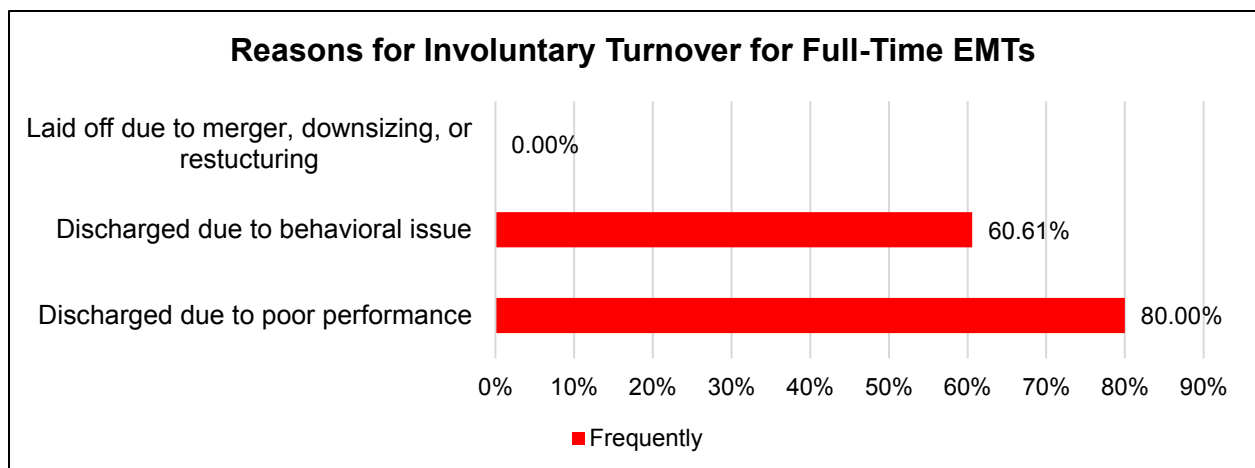
Turnover Rates (48 Organizations)

Forty-eight (48) organizations provided turnover information for full-time EMTs. Based on the survey responses, the mean involuntary turnover rate was 5.39 percent, the mean voluntary turnover rate was 24.19 percent, and the mean total turnover rate was 29.73 percent for full-time EMTs in 2018. Although these are the mean turnover rates, it is important to note there was a large range of turnover rate values reported for full-time EMTs across organizations.



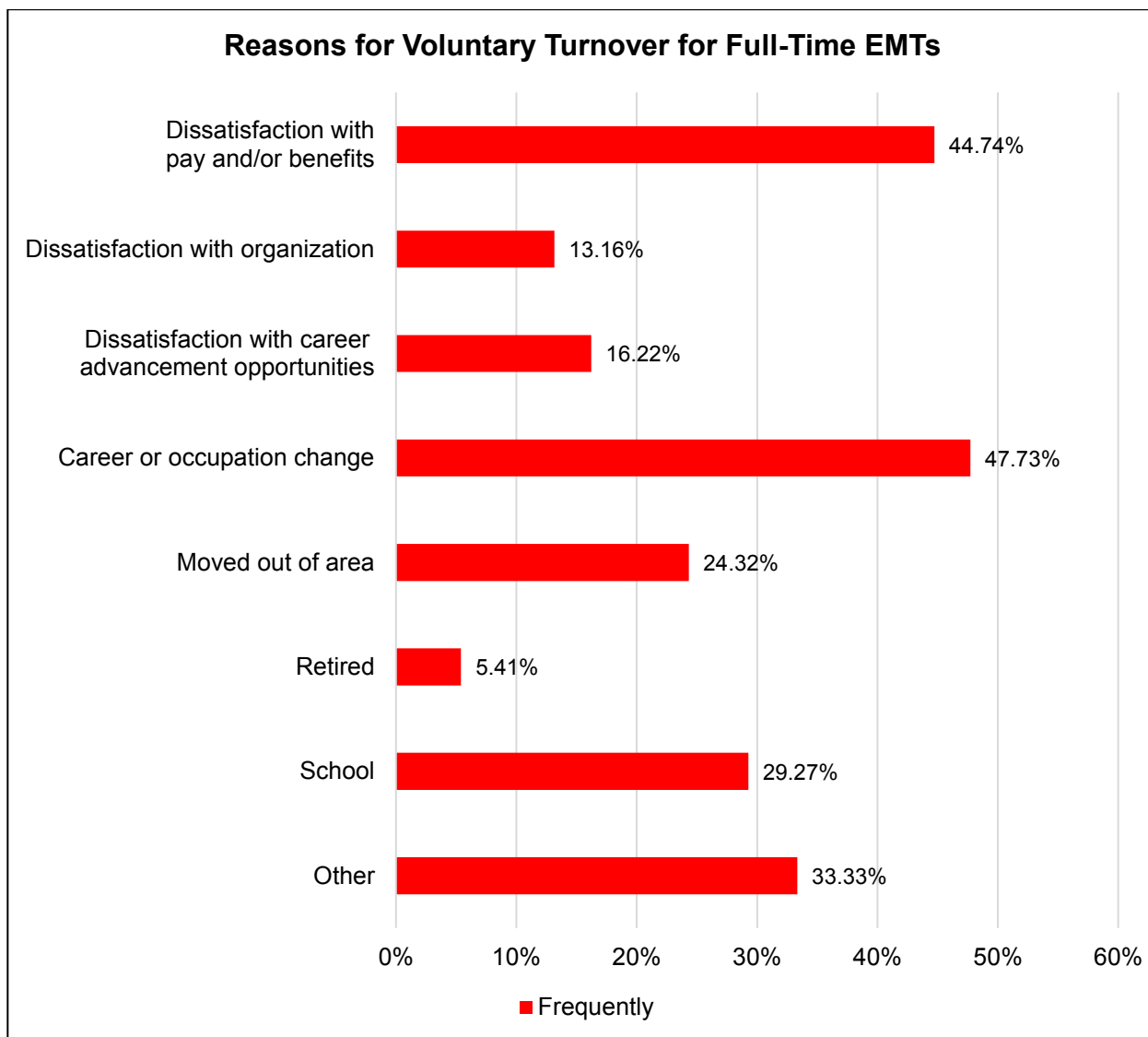
Reasons for Involuntary Turnover

Among the reasons reported frequently for full-time EMTs who left involuntarily in 2018, being discharged due to poor performance was rated highest in importance or frequency.



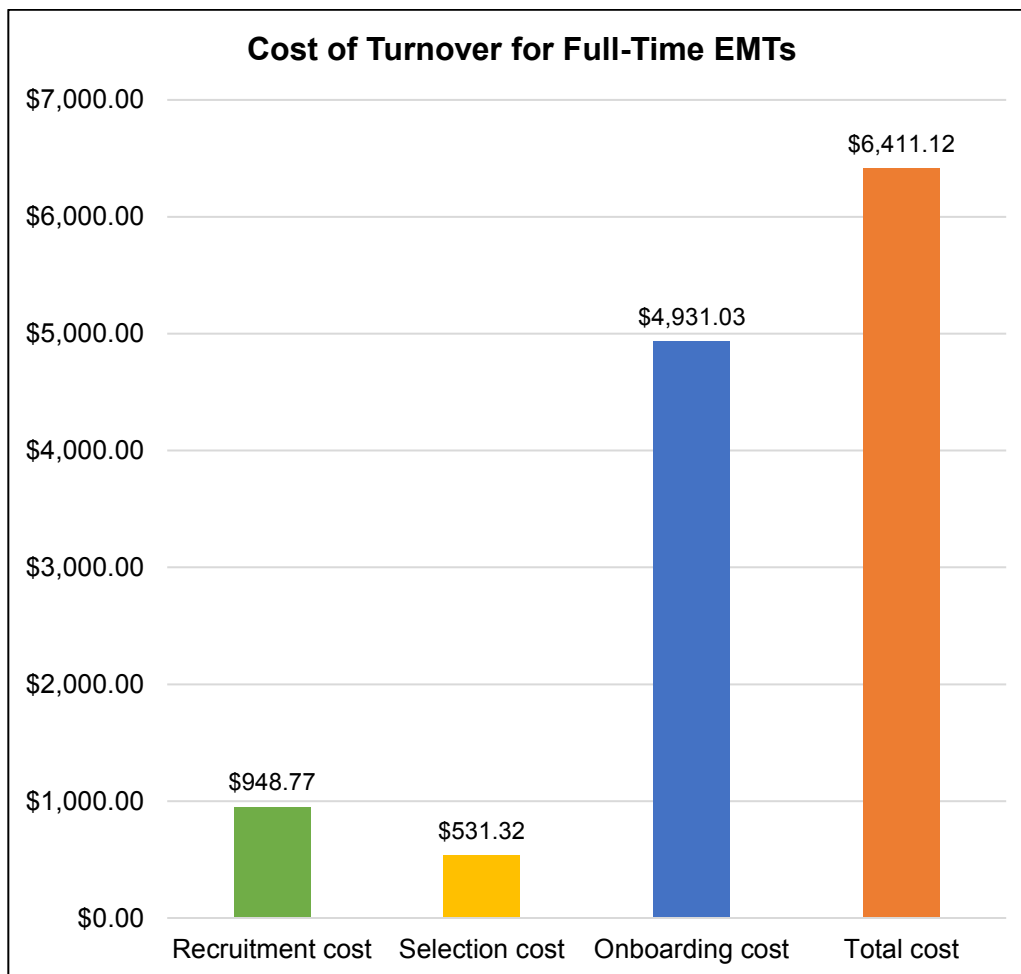
Reasons for Voluntary Turnover

Among the reasons reported frequently for full-time EMTs who left voluntarily in 2018, a career or occupation change was rated highest in importance or frequency as a reason for leaving, followed by dissatisfaction with pay and/or benefits. It should be noted, the question asked was the extent to which each of the reasons was important in making voluntary turnover decisions; respondents were not asked to pick only one reason, but to rate the importance of each reason.



Estimated Price of Turnover

Based on the survey responses, the reported mean price to recruit or attract a full-time EMT was \$948.77, the mean price to select and screen a full-time EMT was \$531.32, and the mean total price to onboard and train a full-time EMT was \$4,931.03. Altogether, the mean price of turnover for full-time EMTs was \$6,411.12. This is comparable to the estimated cost of turnover reported by Patterson²⁶ of \$8,000 and the 16 percent of salary estimate of \$6,400. *Please note, since the AAA / Avesta 2019 price of turnover estimate does not fully consider “soft costs” (i.e., employee integration into company culture, FTO and Supervisor time, etc.) the price should be regarded as an underestimate.*

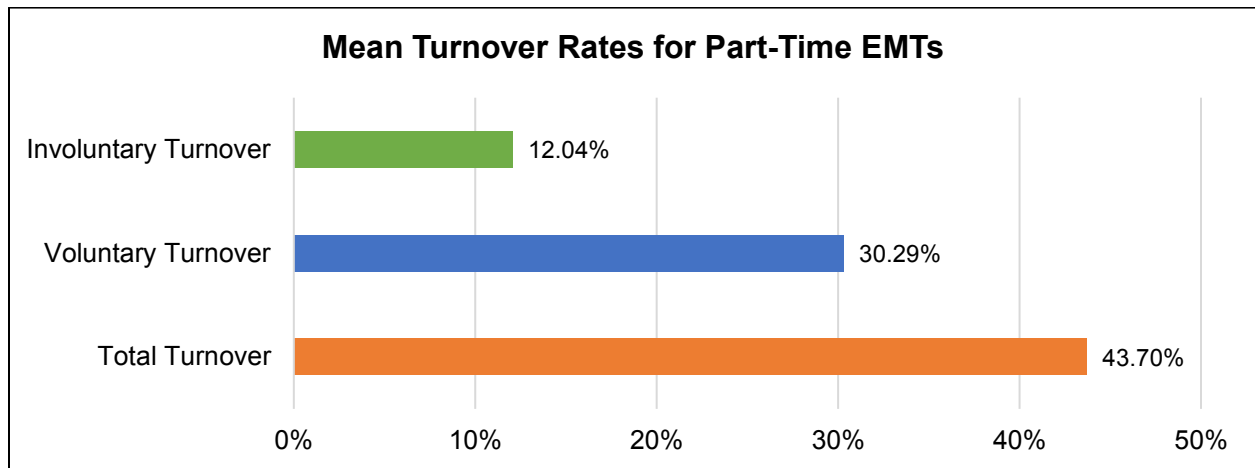


²⁶ Adjusted for inflation.

Results for Part-Time EMTs

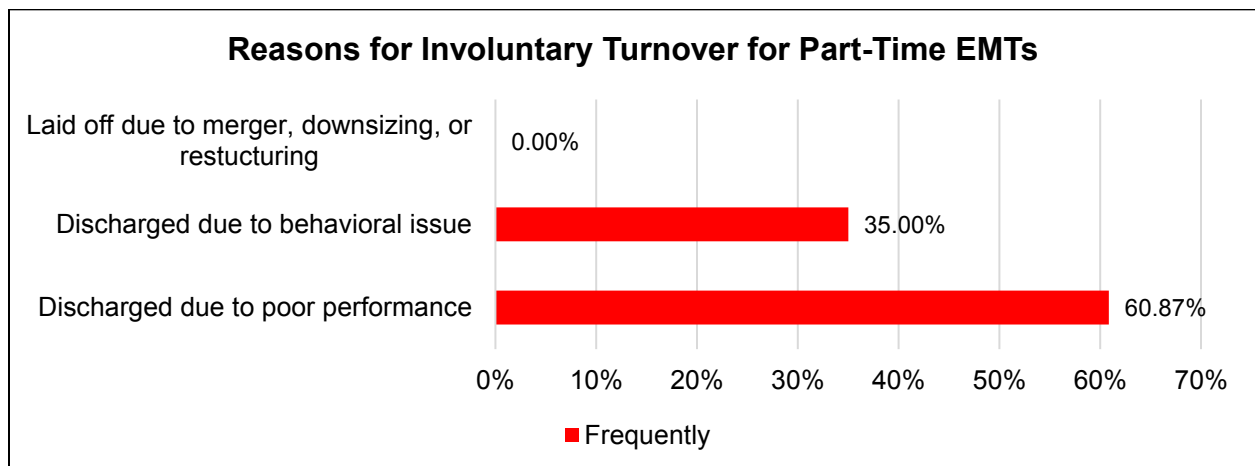
Turnover Rates (42 Organizations)

Forty-two (42) organizations provided turnover information for part-time EMTs. Based on the survey responses, the mean involuntary turnover rate was 12.04 percent, the mean voluntary turnover rate was 30.29 percent, and the mean total turnover rate was 43.70 percent for part-time EMTs in 2018. Although these are the mean turnover rates, it is important to note there was a large range of turnover rate values reported for part-time EMTs across organizations.



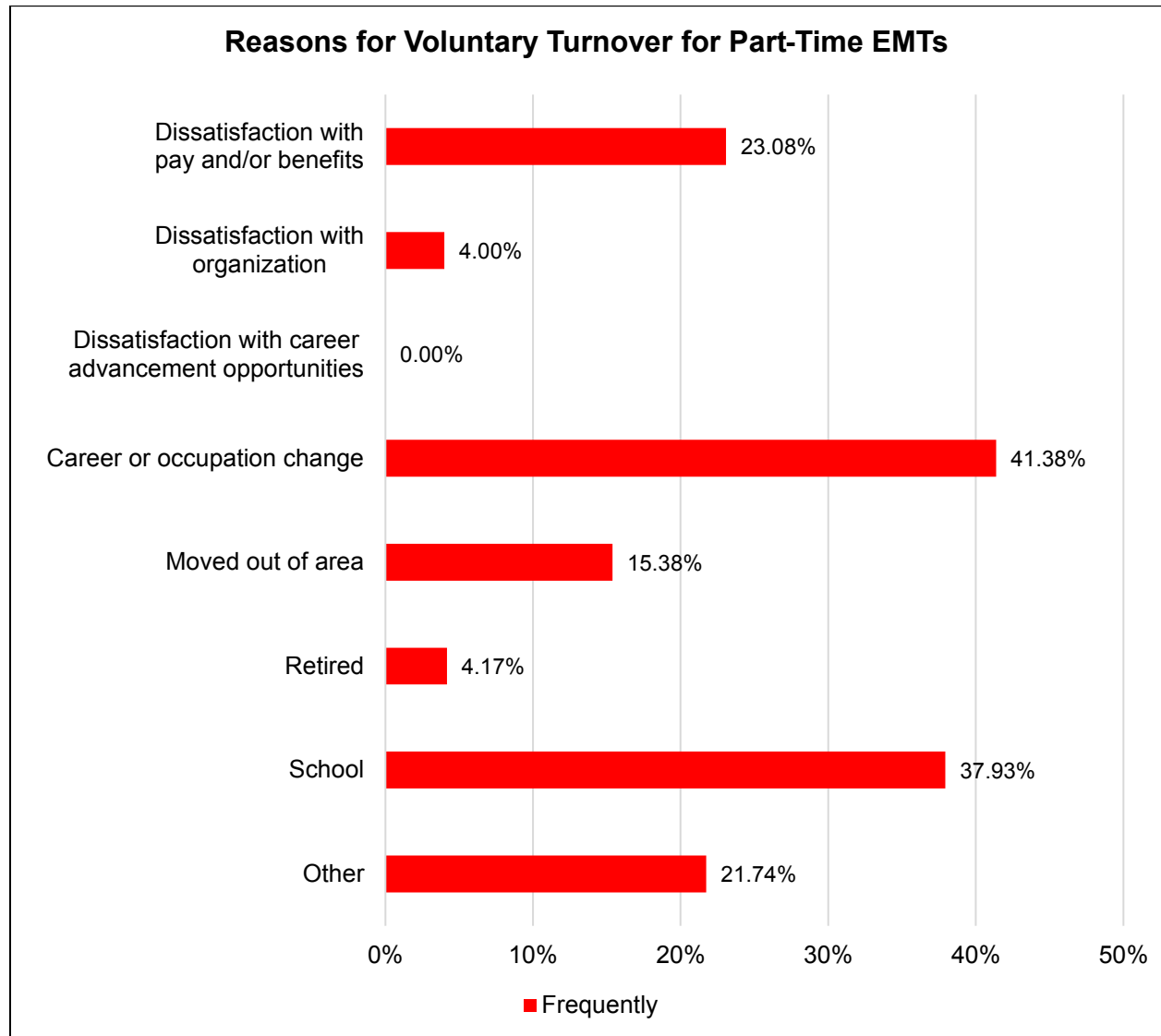
Reasons for Involuntary Turnover

Among the reasons reported frequently for part-time EMTs who left involuntarily in 2018, being discharged due to poor performance was rated highest in importance or frequency.



Reasons for Voluntary Turnover

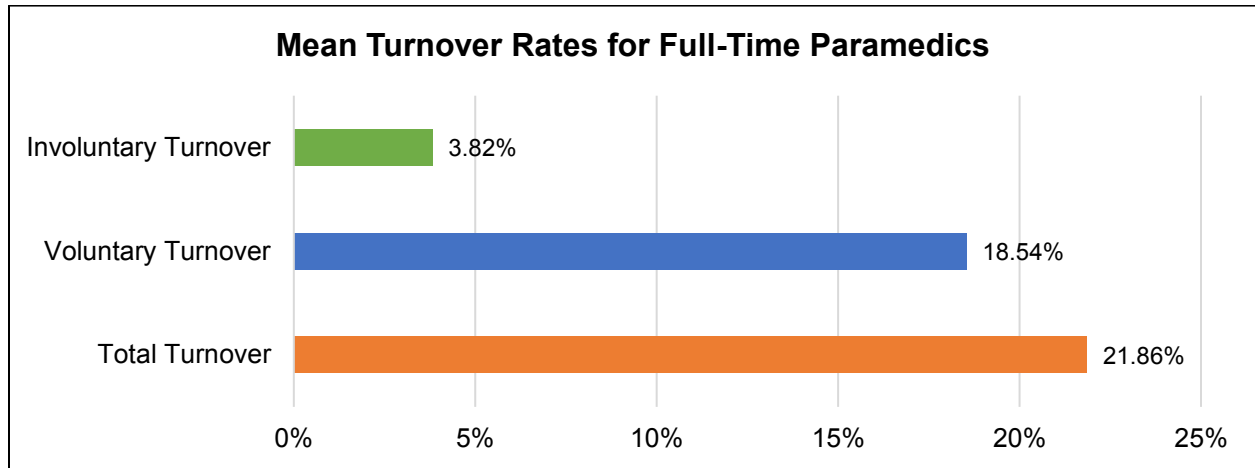
Among the reasons reported frequently for part-time EMTs who left voluntarily in 2018, a career or occupation change was rated highest in importance or frequency as a reason for leaving, followed by school. It should be noted, the question asked was the extent to which each of the reasons was important in making voluntary turnover decisions; respondents were not asked to pick only one reason, but to rate the importance of each reason.



Results for Full-Time Paramedics

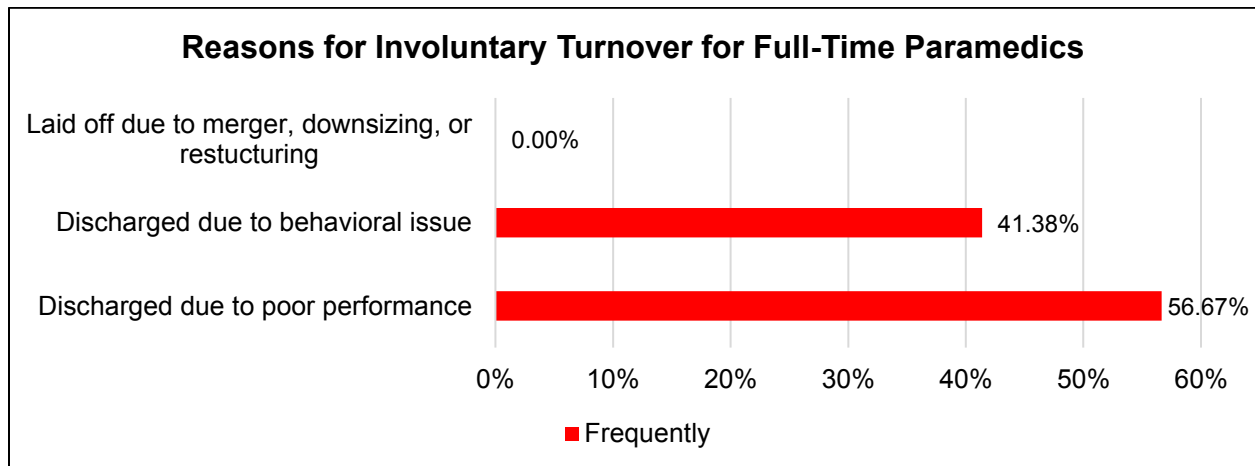
Turnover Rates (46 Organizations)

Forty-six (46) organizations provided turnover information for full-time paramedics. Based on the survey responses, the mean involuntary turnover rate was 3.82 percent, the mean voluntary turnover rate was 18.54 percent, and the mean total turnover rate was 21.86 percent for full-time paramedics in 2018. Although these are the mean turnover rates, it is important to note there was a large range of turnover rate values reported for full-time paramedics across organizations.



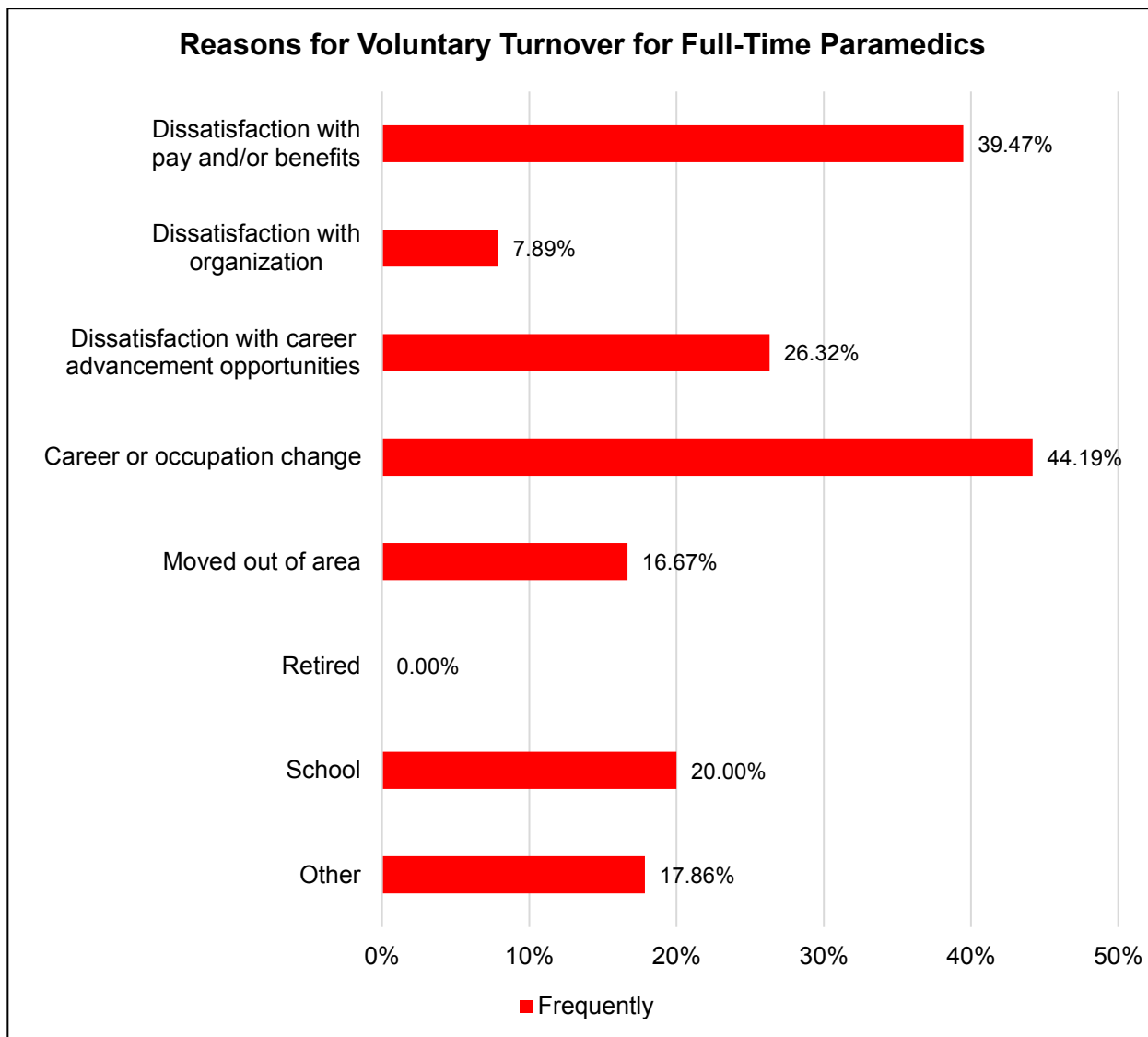
Reasons for Involuntary Turnover

Among the reasons reported frequently for full-time paramedics who left involuntarily in 2018, being discharged due to poor performance was rated highest in importance and frequency.



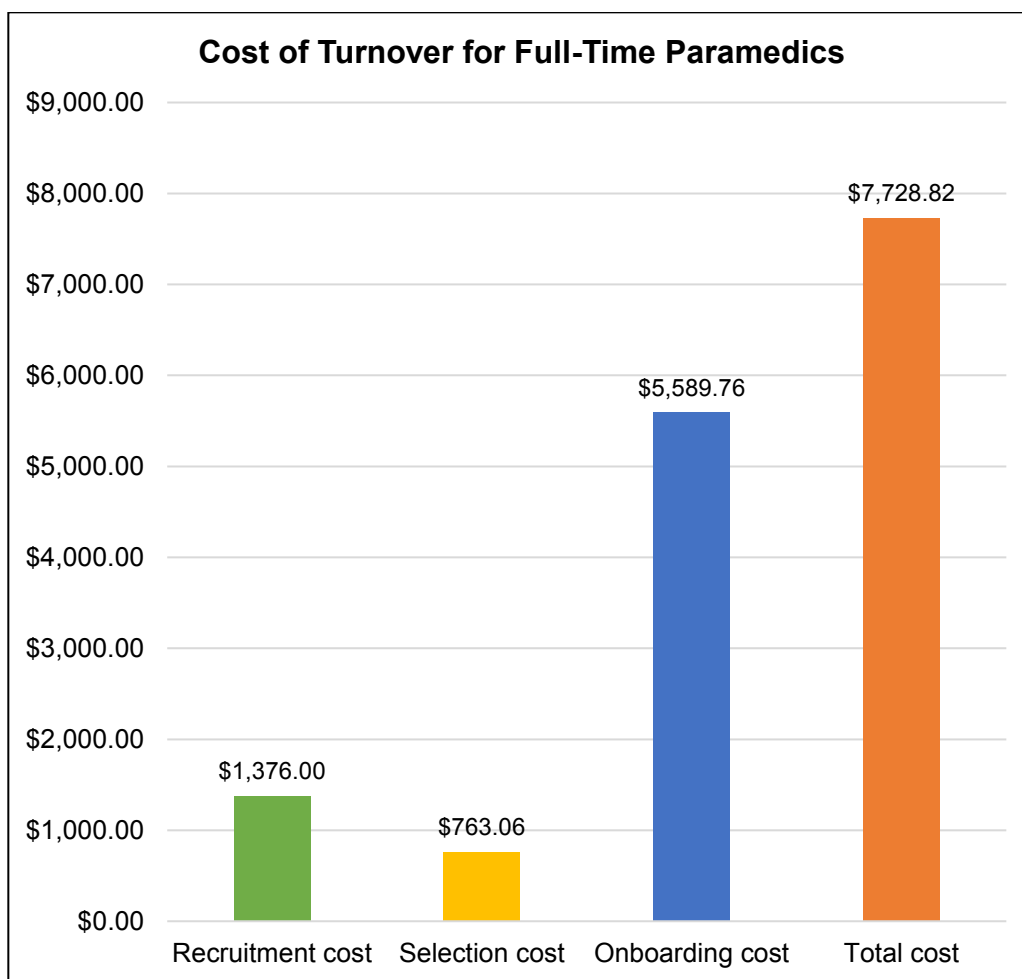
Reasons for Voluntary Turnover

Among the reasons reported frequently for full-time paramedics who left voluntarily in 2018, a career or occupation change was the most frequent reason for leaving, followed by dissatisfaction with pay and/or benefits. It should be noted, the question asked was the extent to which each of the reasons was important in making voluntary turnover decisions; respondents were not asked to pick only one reason, but to rate the importance of each reason.



Estimated Price of Turnover

Based on the survey responses, the mean cost to recruit or attract a full-time paramedic was \$1,376.00, the mean cost to select and screen a full-time paramedic was \$763.06, and the mean total cost to onboard and train a full-time paramedic was \$5,589.76. Altogether, the mean cost of turnover for a full-time paramedic was \$7,728.82. This is comparable to the estimate of cost of turnover reported by Patterson²⁷ of \$8,000 and the 16 percent of salary estimate of \$8,000. *Please note, since the AAA / Avesta 2019 price of turnover estimate does not fully consider “soft costs” (i.e., employee integration into company culture, FTO and Supervisor time, etc.) the price should be regarded as an underestimate.*

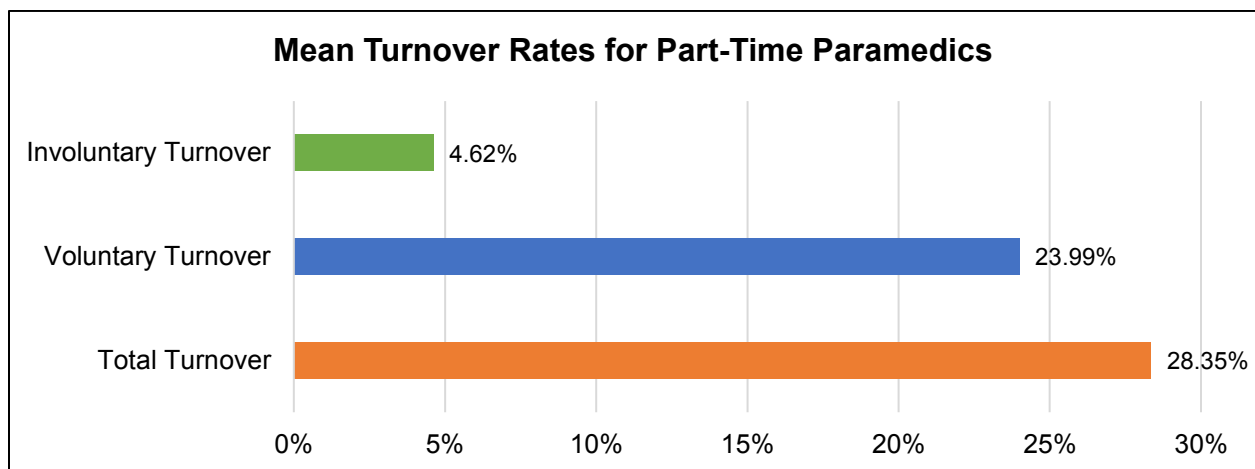


²⁷ Adjusted for inflation.

Results for Part-Time Paramedics

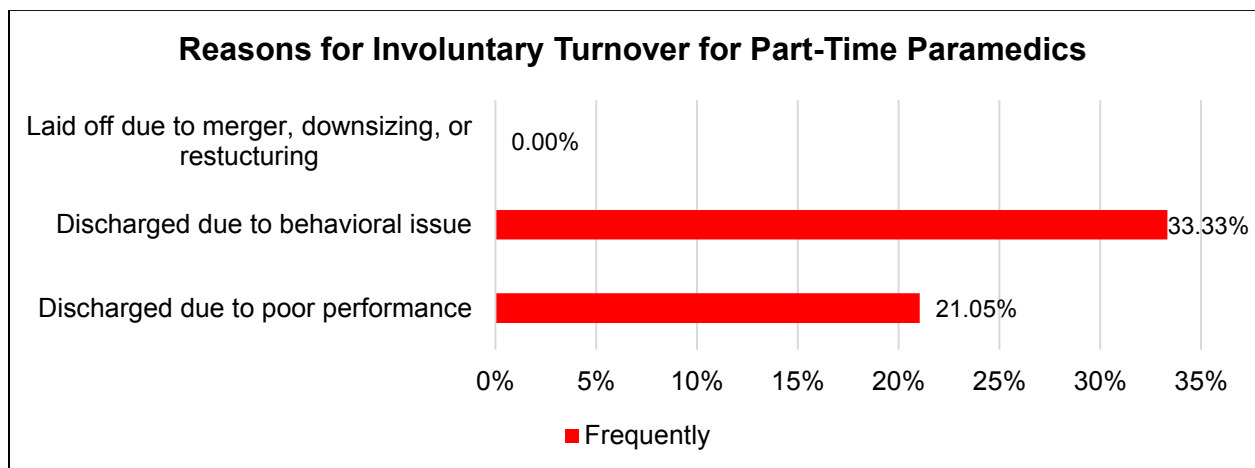
Turnover Rates (36 Organizations)

Thirty-six (36) organizations provided turnover information for part-time paramedics. Based on the survey responses, the mean involuntary turnover rate was 4.62 percent, the mean voluntary turnover rate was 23.99 percent, and the mean total turnover rate was 28.35 percent for part-time paramedics in 2018. Although these are the mean turnover rates, it is important to note there was a large range of turnover rate values reported for part-time paramedics across organizations.



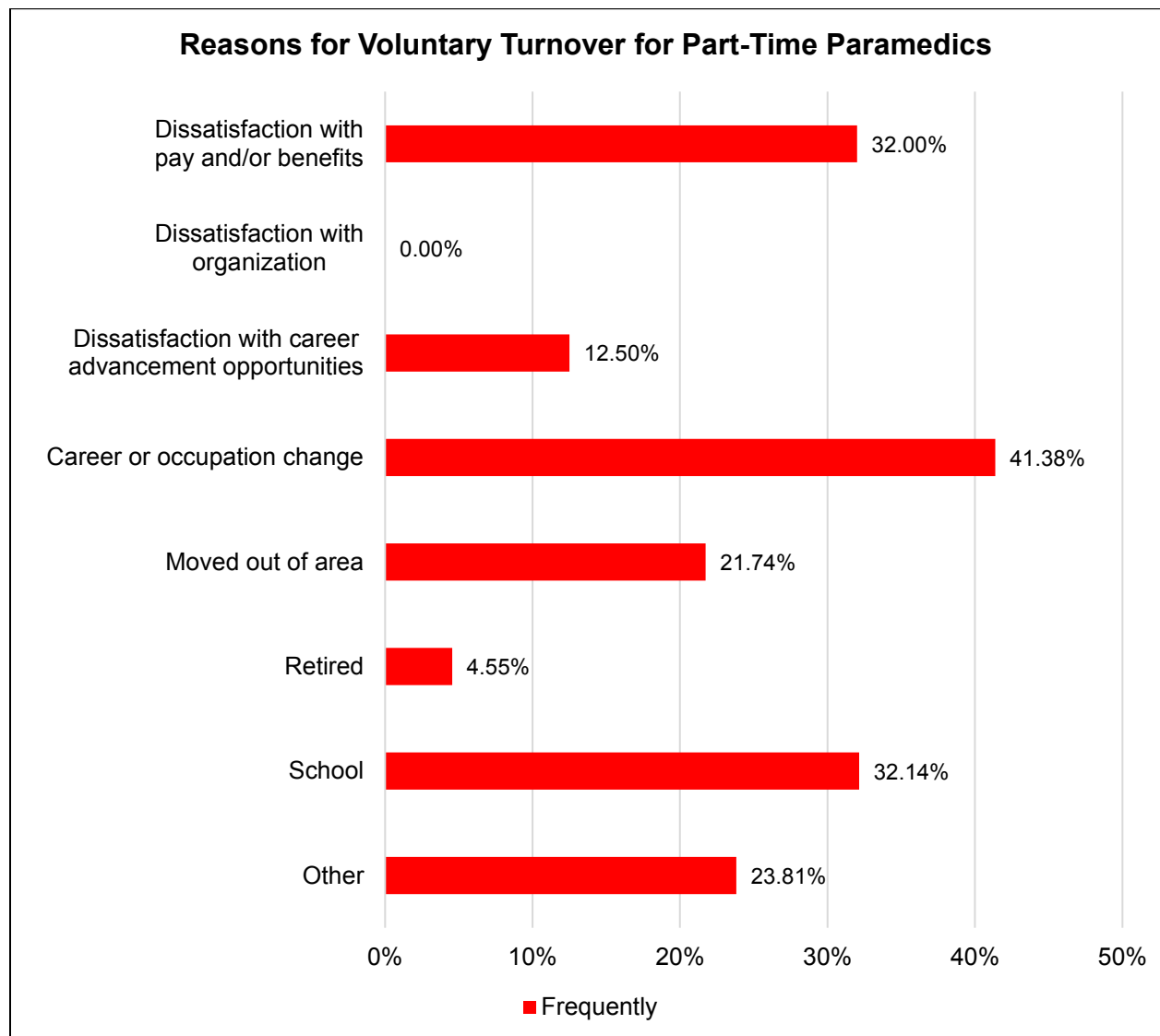
Reasons for Involuntary Turnover

Among the reasons reported frequently from part-time paramedics who left involuntarily in 2018, being discharged due to a behavioral issue was rated highest in importance and frequency.



Reasons for Voluntary Turnover

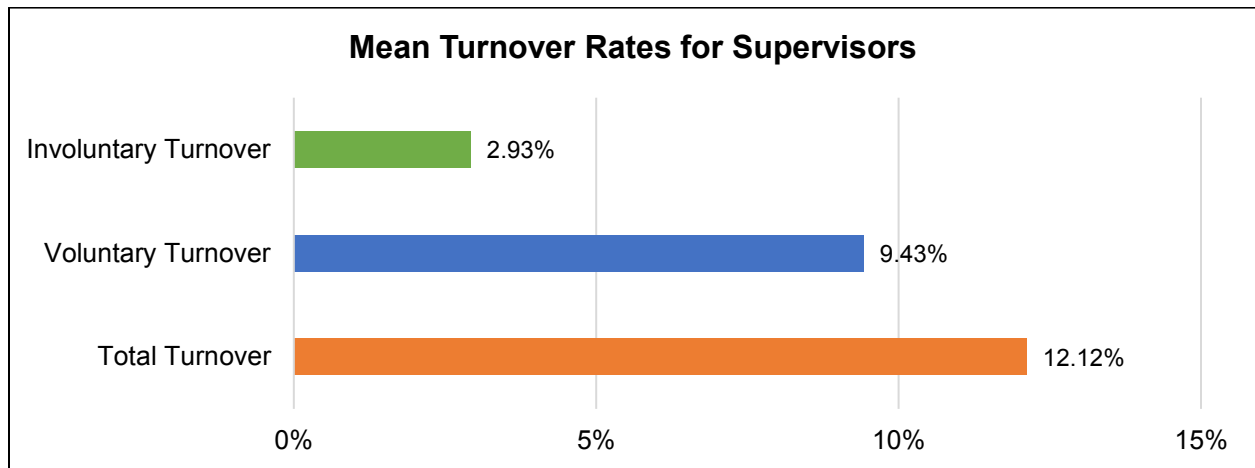
Among the reasons reported frequently for part-time paramedics who left voluntarily in 2018, a career or occupation change was the most frequent reason for leaving, followed by school and dissatisfaction with pay and/or benefits. It should be noted, the question asked was the extent to which each of the reasons was important in making voluntary turnover decisions; respondents were not asked to pick only one reason, but to rate the importance of each reason.



Results for Supervisors

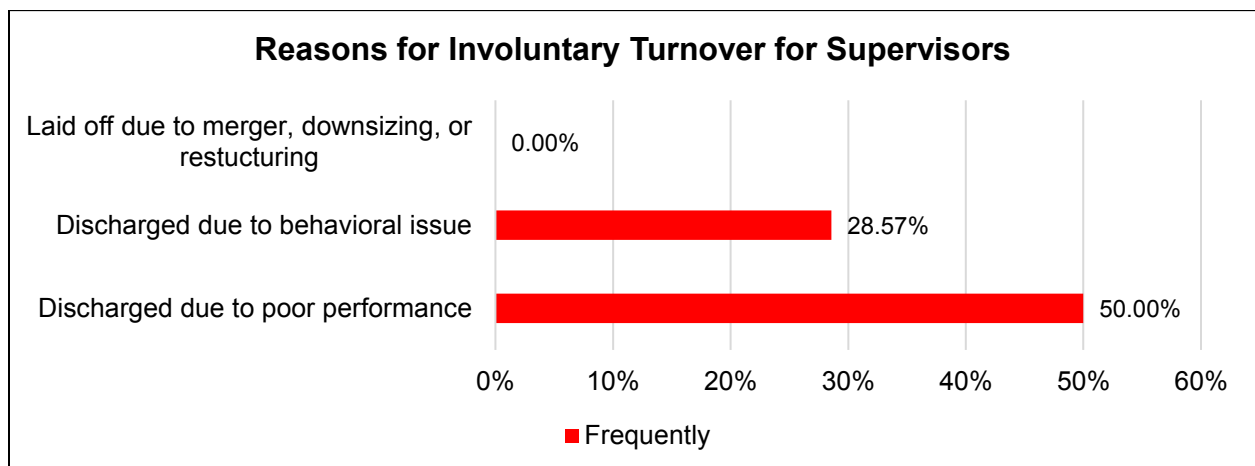
Turnover Rates (54 Organizations)

Fifty-four (54) organizations provided turnover information for supervisors. Based on the survey responses, the mean involuntary turnover rate was 2.93 percent, the mean voluntary turnover rate was 9.43 percent, and the mean total turnover rate was 12.12 percent for supervisors in 2018. Although these were the mean turnover rates, it is important to note there was a large range of turnover rate values reported for supervisors across organizations.



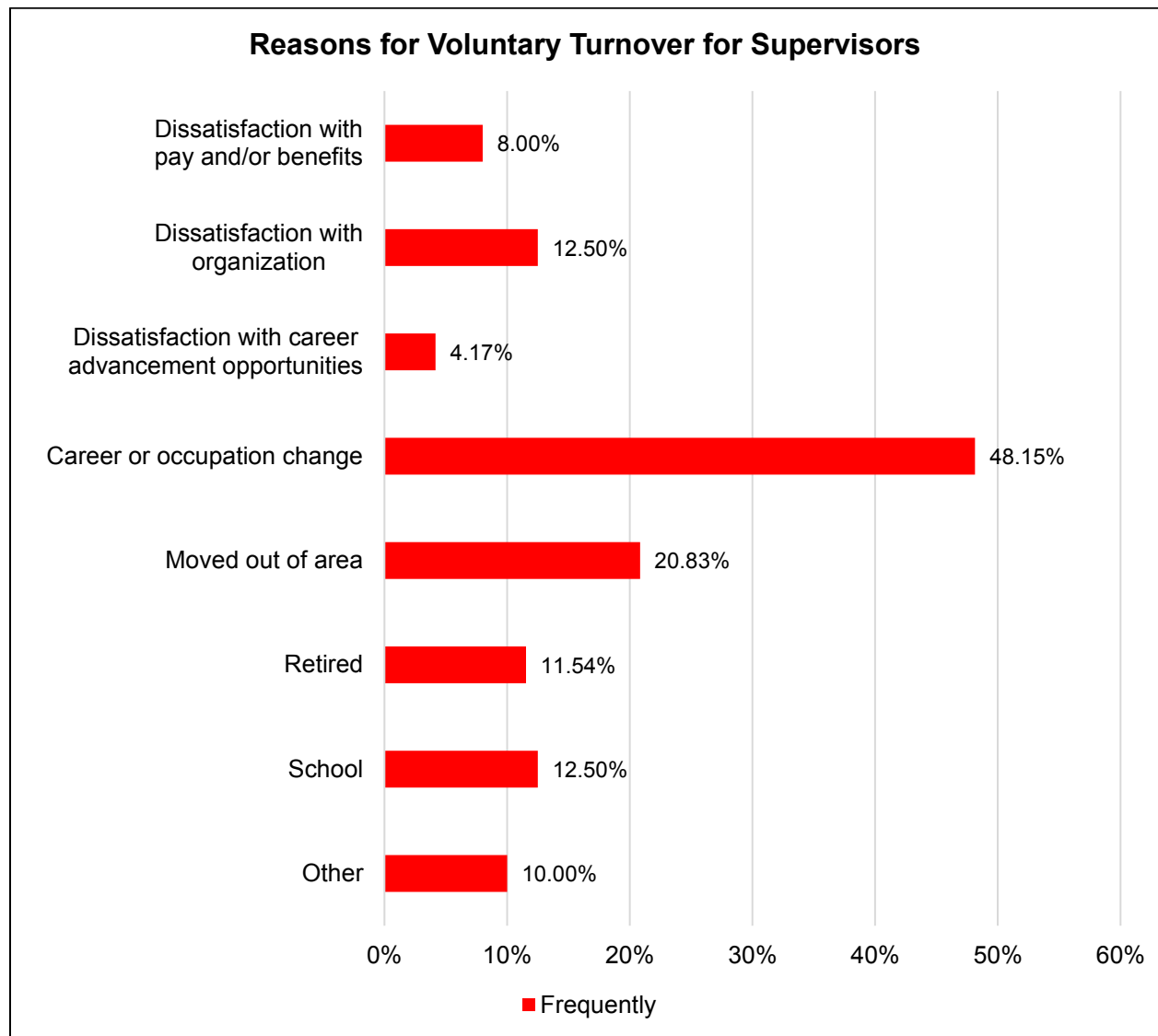
Reasons for Involuntary Turnover

Among the reasons reported frequently for supervisors who left involuntarily in 2018, being discharged due to poor performance was rated highest in importance and frequency.



Reasons for Voluntary Turnover

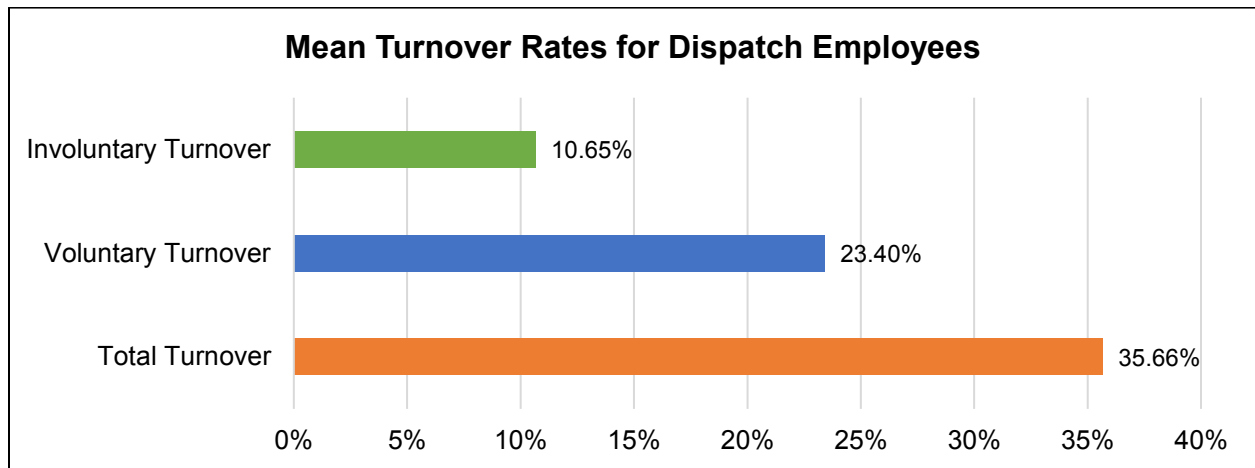
Among the reasons reported frequently for supervisors who left voluntarily in 2018, a career or occupation change was the most frequent reason for leaving, followed by moving out of the area. It should be noted, the question asked was the extent to which each of the reasons was important in making voluntary turnover decisions; respondents were not asked to pick only one reason, but to rate the importance of each reason.



Results for Dispatch Employees

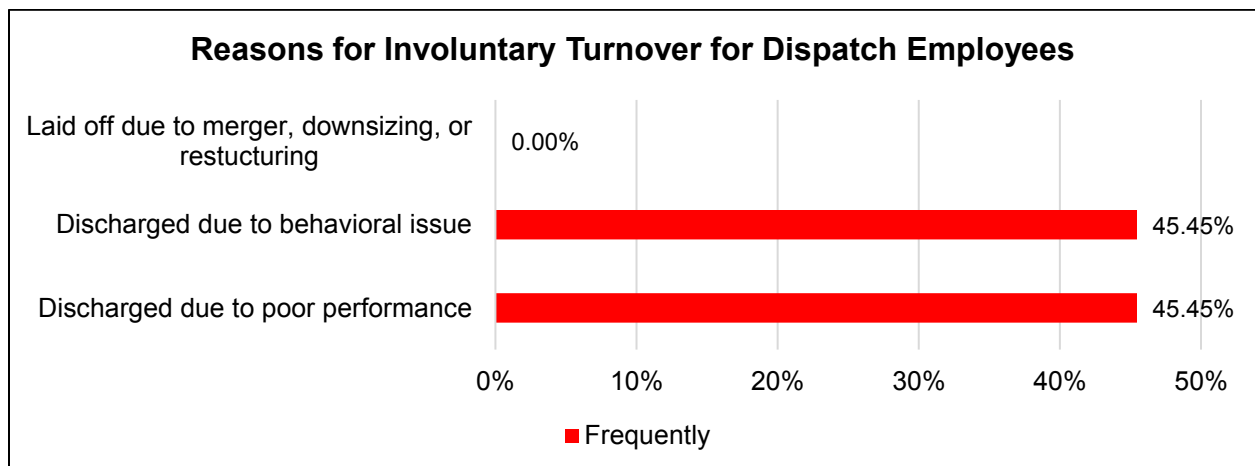
Turnover Rates (30 Organizations)

Thirty (30) organizations provided turnover information for dispatch employees. Based on the survey responses, the mean involuntary turnover rate was 10.65 percent, the mean voluntary turnover rate was 23.40 percent, and the mean total turnover rate was 35.66 percent for dispatch employees in 2018. Although these were the mean turnover rates, it is important to note there was a large range of turnover rate values reported for dispatch employees across organizations.



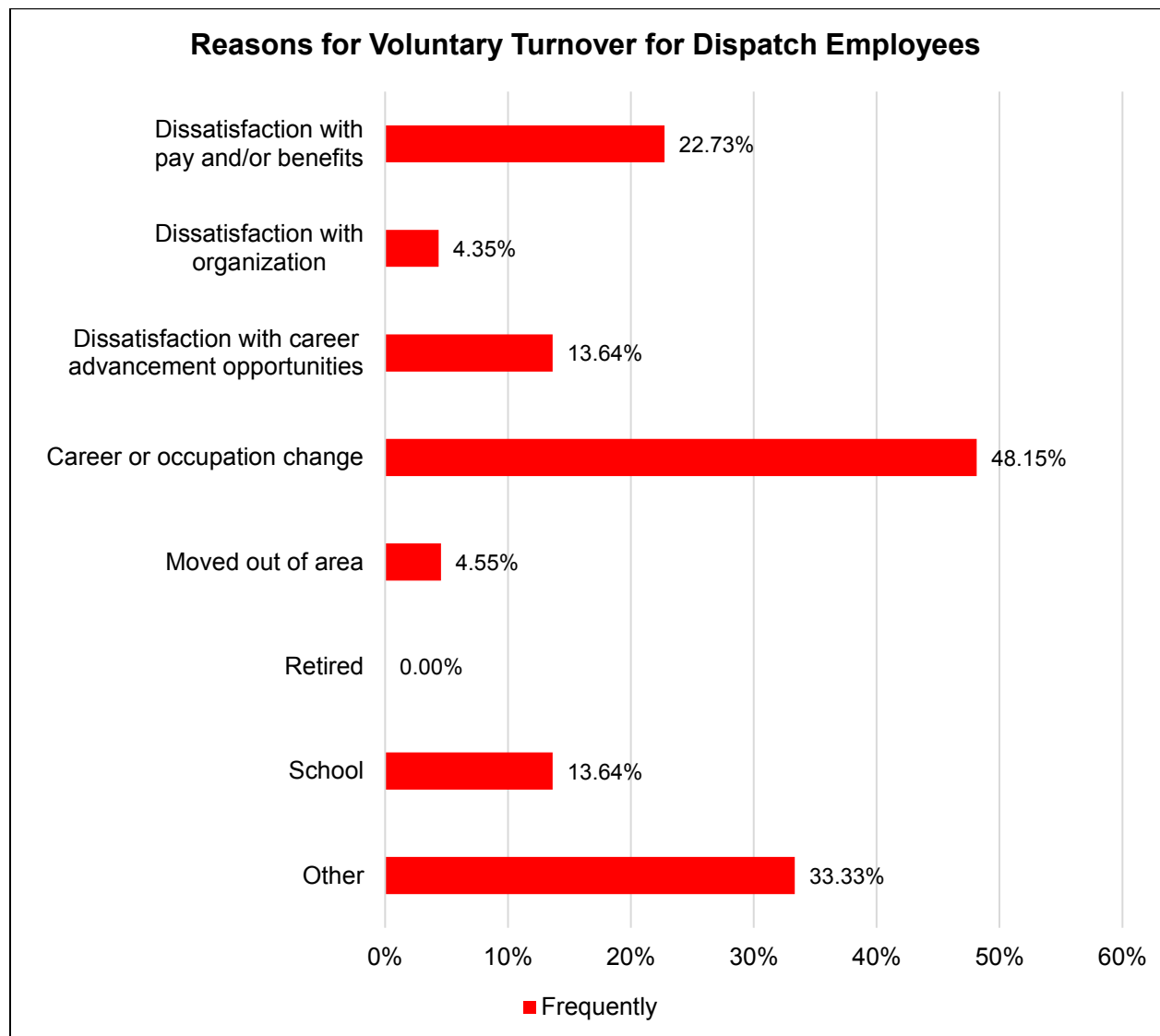
Reasons for Involuntary Turnover

Among the reasons reported frequently for dispatch employees who left involuntarily in 2018, being discharged due to a behavioral issue or poor performance were rated highest in importance and frequency.



Reasons for Voluntary Turnover

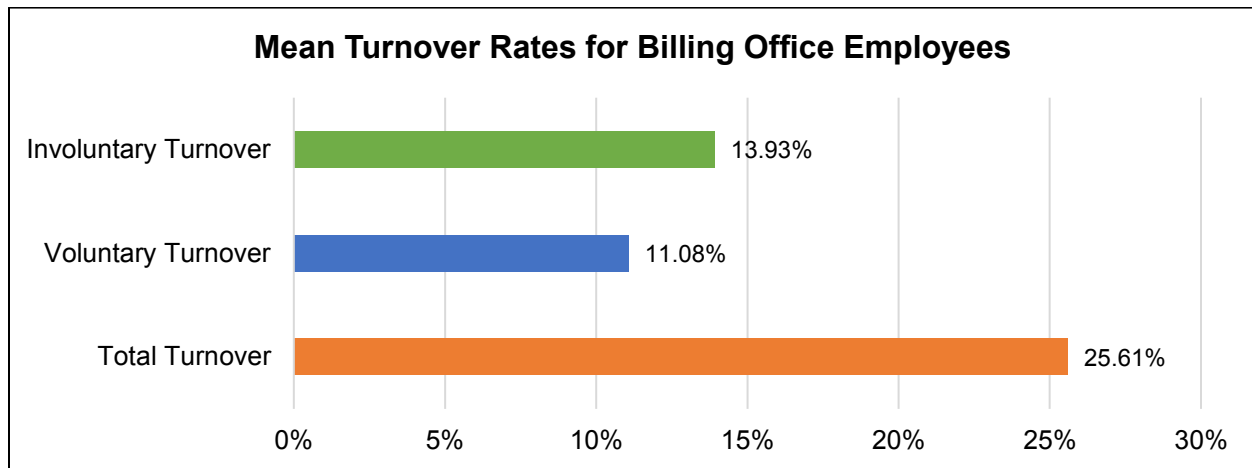
Among the reasons reported frequently for dispatch employees who left voluntarily in 2018, a career or occupation change was the most frequent reason for leaving, followed by reasons other than the ones listed. Unfortunately, we do not have information on the other category. It should be noted, the question asked was the extent to which each of the reasons was important in making voluntary turnover decisions; respondents were not asked to pick only one reason, but to rate the importance of each reason.



Results for Billing Office Employees

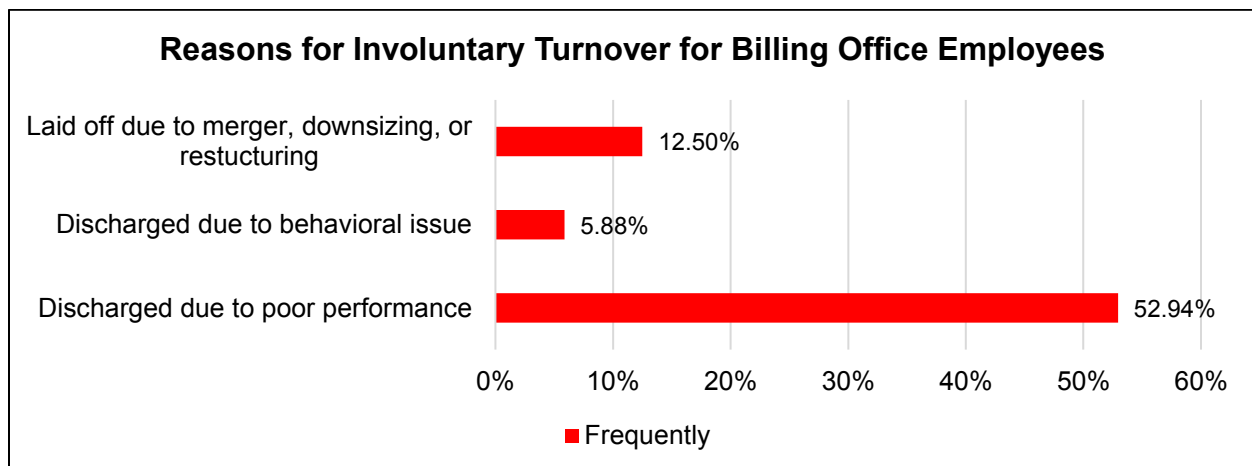
Turnover Rates (42 Organizations)

Forty-two (42) organizations provided turnover information for billing office employees. Based on the survey responses, the mean involuntary turnover rate was 13.93 percent, the mean voluntary turnover rate was 11.08 percent, and the mean total turnover rate was 25.61 percent for billing office employees in 2018. Although these were the mean turnover rates, it is important to note there was a large range of turnover rate values reported for billing office employees across organizations.



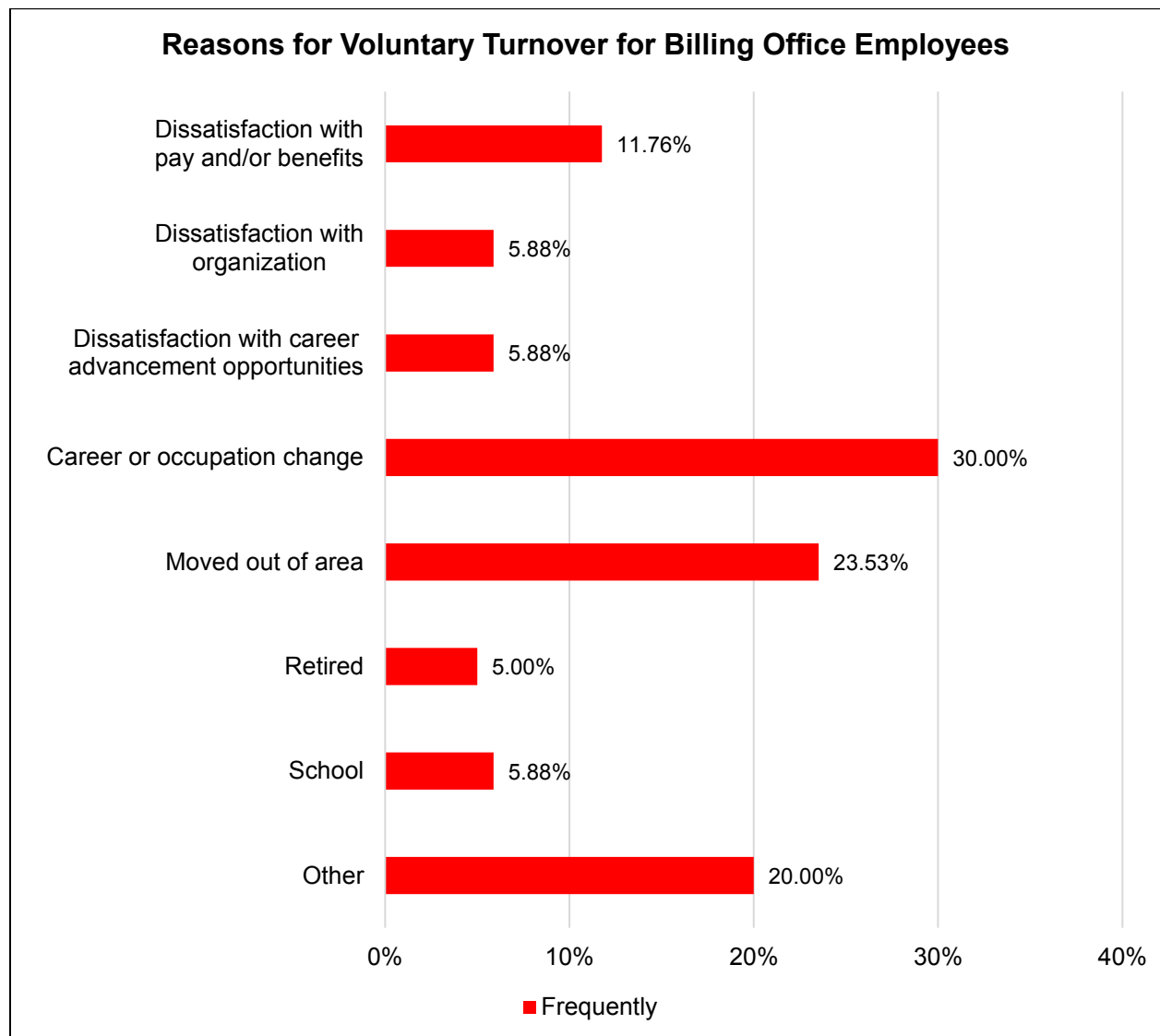
Reasons for Involuntary Turnover

Among the reasons reported frequently for billing office employees who left involuntarily in 2018, being discharged due to poor performance was rated highest in importance and frequency.



Reasons for Voluntary Turnover

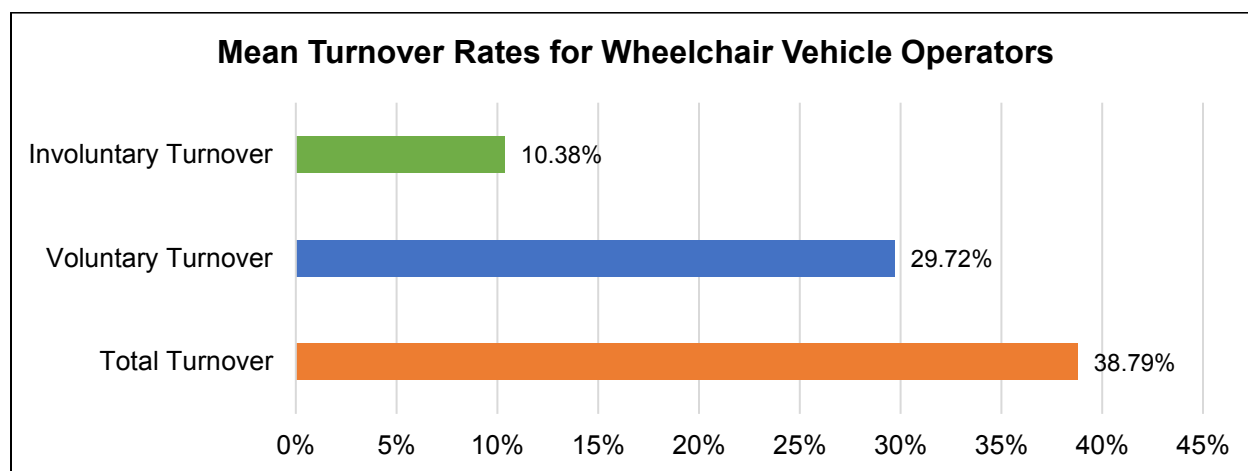
Among the reasons reported frequently for billing office employees who left voluntarily in 2018, a career or occupation change was the most frequent reason for leaving, followed by moving out of the area. It should be noted, the question asked was the extent to which each of the reasons was important in making voluntary turnover decisions; respondents were not asked to pick only one reason, but to rate the importance of each reason.



Results for Wheelchair Vehicle Operators

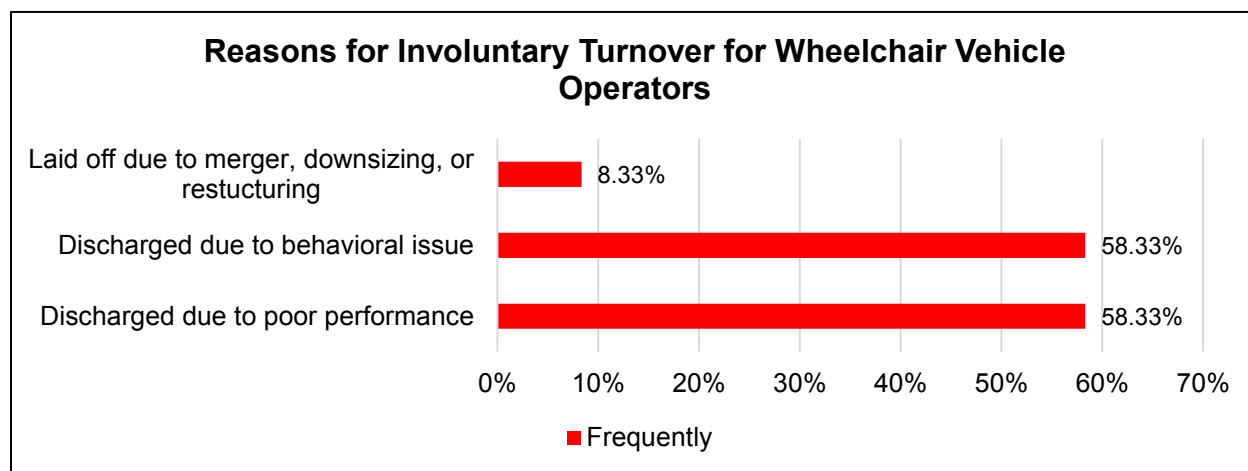
Turnover Rates (17 Organizations)

Seventeen (17) organizations provided turnover information for wheelchair vehicle operators. Based on the survey responses, the mean involuntary turnover rate was 10.38 percent, the mean voluntary turnover rate was 29.72 percent, and the mean total turnover rate was 38.79 percent for wheelchair vehicle operators in 2018. Although these were the mean turnover rates, it is important to note there was a large range of turnover rate values reported for wheelchair vehicle operators across organizations.



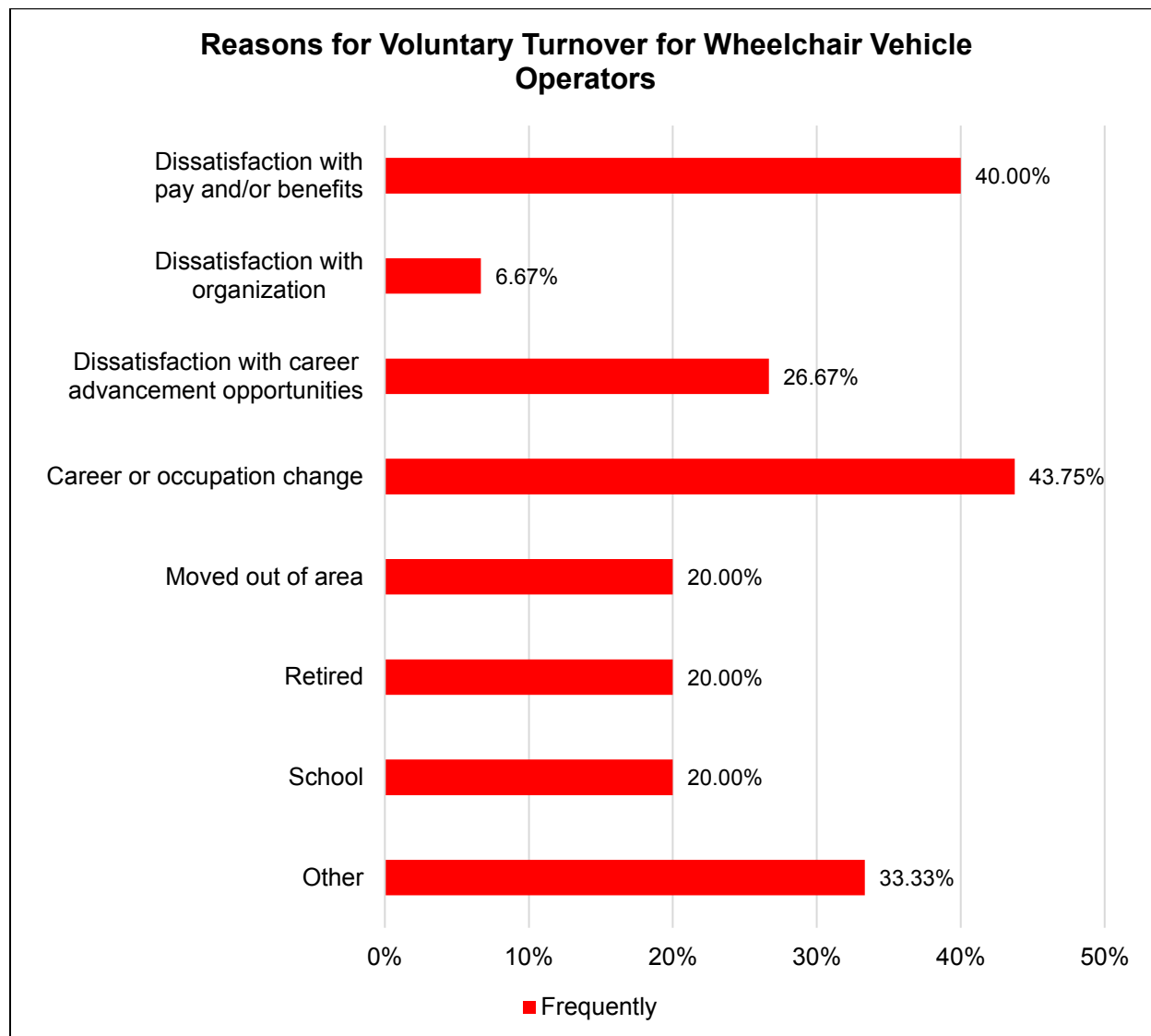
Reasons for Involuntary Turnover

Among the reasons reported frequently for wheelchair vehicle operators who left involuntarily in 2018, being discharged due to a behavioral issue or poor performance were rated highest in importance and frequency.



Reasons for Voluntary Turnover

Among the reasons reported frequently for wheelchair vehicle operators who left voluntarily in 2018, a career or occupation change was the most frequent reason for leaving, followed by dissatisfaction with pay and/or benefits. It should be noted, the question asked was the extent to which each of the reasons was important in making voluntary turnover decisions; respondents were not asked to pick only one reason, but to rate the importance of each reason.



Turnover Rates by Sector, Organization Size and Other Factors

Since the turnover rates were provided for companies in various sectors and of various sizes, further insight can be gained by looking at each of the mean turnover rates broken down by those variables. The following tables provide the mean turnover rates by sector and organization size. To protect anonymity, any sector, organizational size or job title with fewer than 10 reported turnover rates was not reported.

In general, inspection of Table 4²⁸ reveals the results for sector were inconsistent in terms of turnover rates. To assist in interpreting the results, a deeper look was taken for two of the more critical job titles: full-time EMT and full-time paramedic. A statistical analysis referred to as an analysis of variance was used to compare the results for the Private Sector – For Profit, Private Sector – Not for Profit, and Public Sector. For both full-time paramedics and full-time EMTs, sector was not a significant predictor of turnover.

Organizational size was next investigated in terms of its impact on turnover, as seen in Table 5.²⁹ Overall, turnover seemed to be higher for larger organizations. However, the results of a statistical analysis revealed that organizational size had no significant effect on turnover rates.

The results are also presented for informational purposes by region of the country, in Table 6.³⁰ Although they varied by job type, for full-time EMT, the highest turnover rates were observed for the South and Southeast

Predictors of Turnover Rate

An analysis was then conducted to look at predictors of turnover rate by job category. The possible predictors included:

- Sector
- Size
- Use of pre-employment test
- Use of attitude surveys
- Pay compared to market

The use of pre-employment tests and attitude surveys were included as proxies for the use of HR interventions. Pay compared to market was included because it is one of the frequently cited reasons for turnover. Seventy-eight percent of organizations reported using pre-employment testing. Sixty percent reported using attitude surveys. For market

²⁸ Table 4 can be found at the end of the report.

²⁹ Table 5 can be found at the end of the report.

³⁰ Table 6 can be found at the end of the report; results are provided only for those regions where there was sufficient data to estimate a stable turnover figure. For the West and Rocky Mountains, Southwest, and Texas regions there were not enough organizations to provide stable estimates.

pay, 14 percent reported paying below market, 67 percent at market, and 19 percent reported paying above market.

The significant predictors by job category appear in Table 7. Unlike 2017, there was no consistent trend. Although paying above market was related to a lower turnover rate for full-time paramedics and supervisors, the opposite was found for part-time paramedics. Given the smaller sample sizes for the analysis for 2018, the results would be expected to be less stable. Certainly, there are no obvious trends.

Table 7. Statistically Significant Predictors of Turnover Rate

Occupation	Significant Predictors
Full-time EMT	None
Part-time EMT	None
Full-time Paramedic	Pay, above market lower turnover
Part-time Paramedic	Size and pay — but smaller size and below market pay resulted in less turnover
Supervisor	Pay, above market lower turnover
Dispatch	None
Billing Office	None
Wheelchair Vehicle	None

Time with Organization Before the Turnover Event

Respondents were asked to note the number of months after initial employment that employees left in 2018. The percentages corresponding to each time range appear in Table 8. Forty percent of the employees who left did so within the first year.

Table 8. For Employees Who Left — Time Until Leaving the Organization

Time Until Leaving the Organization ³¹	Percentage
0 - 3 months	12.00%
4 - 6 months	11.79%
7 – 12 months	15.77%
Total first year	39.56%
1 – 2 years	23.75%
2+ years	36.69%

³¹ Percentages add up to more than 100% due to rounding.

Supplemental or Alternative Weighted Analysis

All analyses to this point have treated organizations as contributing equally to the results. That is, in calculating any statistics, all organizational data was treated as equal or all organizations were given an equal weight in calculating the average. Although there are several reasons for preferring this analysis, it also had a disadvantage in that a strong argument could be made that an analysis calculated on only larger organizations would give more stable estimates. In addition, such an analysis would give results more similar to those reported by the federal government and HR groups.

Therefore, an alternative analysis was conducted in which the turnover statistics for an organization were weighted by the headcount for the job category before calculating the average turnover. This analysis appears in Table 9 as the Weighted Average Turnover.

Table 9. Weighted Average Turnover Rates by Occupational Category

Occupation	Weighted Average Turnover			
	Headcount	Overall Turnover	Voluntary Turnover	Involuntary Turnover
Full-time EMT	6169	28.27%	22.14%	6.00%
Part-time EMT	1913	47.31%	29.46%	17.99%
Full-time Paramedic	3728	19.13%	15.69%	3.60%
Part-time Paramedic	1072	36.66%	23.79%	13.19%
Supervisor	975	8.31%	6.42%	1.97%
Dispatch	733	31.38%	20.33%	10.64%
Billing Office	689	27.14%	18.36%	8.22%
Wheelchair Vehicle	688	33.72%	22.97%	10.17%
All U.S. Occupations		18.00%	13.00%	6.00%

^aNote, voluntary and involuntary turnover do not add up to equal overall turnover because they are an average or mean across all organizations. Some organizations reported overall separations but not voluntary and involuntary separations.

Avesta Research on Turnover From the Employee Perspective

Some of the feedback received in response to last year's report indicated that we were looking at turnover from the point of view of the organization or employer and not the employee. Therefore, in this section we will present some data on the employee perspective.

Avesta has been conducting research on turnover in the ambulance industry and attempting to build models of turnover that can lead to actionable recommendations. Based on surveys of the relationship between employee attitudes and intentions to leave an organization, we find the factors consistently related to possible turnover include:

- Pay
- Communications — transparency with supervisors and management
- Fairness exhibited by supervisors and managers
- Performance management
- Work-life balance and experienced stress

Table 4. Turnover Rates by Sector

Mean Total Turnover Rates

	Supervisors	Dispatch Employees	Billing Office Employees	Full-Time EMTs	Part-Time EMTs	Full-Time Paramedics	Part-Time Paramedics	Wheelchair Vehicle Operators
Public Sector- Stand Alone EMS	10.39%	-	17.10%	34.03%	35.49%	14.97%	-	-
Private Sector – For Profit	14.71%	39.99%	35.88%	30.75%	51.46%	22.97%	31.30%	36.14%
Private Sector – Not for Profit or Nonprofit	12.51%	-	17.72%	28.11%	41.72%	29.59%	-	-
Public Sector – Fire Department, Hospital-Based, and Other	-	-	-	-	-	-	-	-

Mean Voluntary Turnover Rates

	Supervisors	Dispatch Employees	Billing Office Employees	Full-Time EMTs	Part-Time EMTs	Full-Time Paramedics	Part-Time Paramedics	Wheelchair Vehicle Operators
Public Sector- Stand Alone EMS	10.15%	-	-	29.89%	24.59%	12.75%	-	-
Private Sector – For Profit	10.49%	29.26%	11.09%	23.76%	31.39%	18.36%	25.00%	23.01%
Private Sector – Not for Profit or Nonprofit	8.88%	-	-	22.79%	36.92%	26.76%	-	-
Public Sector – Fire Department, Hospital-Based, and Other	-	-	-	-	-	-	-	-

Mean Involuntary Turnover Rates

	Supervisors	Dispatch Employees	Billing Office Employees	Full-Time EMTs	Part-Time EMTs	Full-Time Paramedics	Part-Time Paramedics	Wheelchair Vehicle Operators
Public Sector- Stand Alone EMS	0.12%	-	-	4.14%	10.89%	3.47%	-	-
Private Sector – For Profit	4.33%	10.73%	19.78%	6.62%	17.22%	4.90%	7.20%	12.89%
Private Sector – Not for Profit or Nonprofit	4.46%	-	-	5.32%	4.80%	2.87%	-	-
Public Sector – Fire Department, Hospital-Based, and Other	-	-	-	-	-	-	-	-

Table 5. Turnover Rates by Organization Size

Mean Total Turnover Rates

	Supervisors	Dispatch Employees	Billing Office Employees	Full-Time EMTs	Part-Time EMTs	Full-Time Paramedics	Part-Time Paramedics	Wheelchair Vehicle Operators
1-99 Employees	9.04%	-	6.59%	24.09%	40.77%	18.58%	15.32%	-
100-199 Employees	7.95%	-	14.77%	24.77%	35.02%	15.95%	-	-
200+ Employees	18.90%	31.83%	52.53%	37.68%	52.47%	29.26%	37.54%	28.13%

Mean Voluntary Turnover Rates

	Supervisors	Dispatch Employees	Billing Office Employees	Full-Time EMTs	Part-Time EMTs	Full-Time Paramedics	Part-Time Paramedics	Wheelchair Vehicle Operators
1-99 Employees	6.97%	-	2.38%	19.29%	23.89%	16.38%	14.44%	-
100-199 Employees	5.64%	-	4.33%	20.56%	24.74%	12.65%	-	-
200+ Employees	15.45%	22.65%	23.23%	30.68%	39.99%	24.82%	29.53%	19.57%

Mean Involuntary Turnover Rates

	Supervisors	Dispatch Employees	Billing Office Employees	Full-Time EMTs	Part-Time EMTs	Full-Time Paramedics	Part-Time Paramedics	Wheelchair Vehicle Operators
1-99 Employees	2.07%	-	4.76%	4.80%	12.93%	2.45%	0.95%	-
100-199 Employees	2.32%	-	4.04%	4.21%	10.28%	3.30%	-	-
200+ Employees	4.52%	8.64%	29.30%	6.63%	12.48%	5.59%	8.63%	8.29%

Table 6. Turnover Rates by Region³²

Mean Total Turnover Rates

	Supervisors	Dispatch Employees	Billing Office Employees	Full-Time EMTs	Part-Time EMTs	Full-Time Paramedics	Part-Time Paramedics	Wheelchair Vehicle Operators
Midwest	12.95%	-	16.69%	18.32%	30.79%	16.11%	18.24%	-
Northeast	15.49%	-	46.57%	24.52%	41.91%	26.23%	-	-
South & Southeast	12.70%	45.82%	16.76%	37.89%	-	-	-	-

Mean Voluntary Turnover Rates

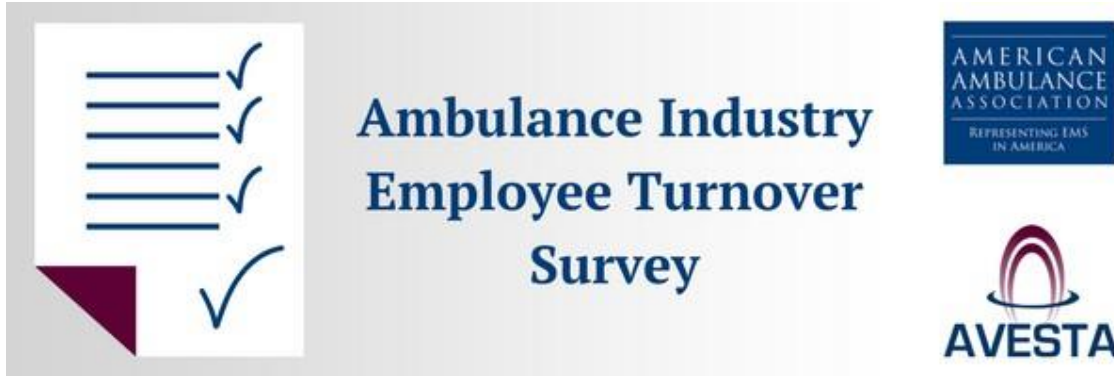
	Supervisors	Dispatch Employees	Billing Office Employees	Full-Time EMTs	Part-Time EMTs	Full-Time Paramedics	Part-Time Paramedics	Wheelchair Vehicle Operators
Midwest	9.96%	-	7.05%	15.76%	27.93%	14.84%	14.76%	-
Northeast	9.63%	-	-	19.04%	34.16%	20.87%	-	-
South & Southeast	11.00%	28.60%	9.40%	27.87%	-	-	-	-

Mean Involuntary Turnover Rates

	Supervisors	Dispatch Employees	Billing Office Employees	Full-Time EMTs	Part-Time EMTs	Full-Time Paramedics	Part-Time Paramedics	Wheelchair Vehicle Operators
Midwest	2.98%	-	2.07%	2.56%	2.86%	2.29%	3.48%	-
Northeast	6.01%	-	-	4.95%	7.74%	6.59%	-	-
South & Southeast	2.78%	13.47%	7.35%	10.02%	-	-	-	-

³² Results are only reported for those comparisons resulting in sufficient organizations to produce stable results.
 © AAA and Avesta Systems Inc; Confidential report; All rights reserved. Turnover and Retention for EMS - 2019 42

Appendix A. Letter for Turnover Survey



AAA / Avesta 2019 Ambulance Industry Employee Turnover Study

The American Ambulance Association is partnering with Avesta, a long-time ambulance industry partner and Human Resource support firm, to conduct our second annual industry turnover study. Through the use of this survey, our intent is to comprehensively collect and analyze ambulance industry employee turnover data so as to produce a report that provides useful and actionable data. We are inviting EMS organizations to participate in the study. The study will be conducted and managed by Dennis Doverspike, PhD, and the Center for Organizational Research at The University of Akron. Each response will be strictly confidential.

The purpose of the study is to better quantify and understand the reasons for turnover at nearly every organizational level within the EMS Industry.

Thank you very much for your time and support. Please start with the survey now by clicking on the Continue button below.

Laying the Groundwork for Reducing Employee Turnover

Why participate in the survey?

1. Educate elected officials, municipalities, and healthcare clients. The insight gained from this survey can help influence the actions, policies, or decisions of officials regarding funding. Specifically, this important data can help validate the critical staffing challenges faced by the EMS industry. This year, we added queries to the survey to better understand the cost of turnover.
2. This study is critical to gaining insight into combating staff shortages. AAA / Avesta 2019 Ambulance Industry Employee Turnover Study aims to yield the information that organizations need to identify and benchmark their turnover challenges. Last year's survey generated the largest response to a turnover survey ever published for the private EMS industry.
3. Participating organizations will have full access to the final report at no charge. The comprehensive results of the study will be shared exclusively with each participating organization. Shorter write-ups and summaries of the results may be shared at conferences or published in relevant periodicals or journals.

Before You Start

It is recommended you gather information about your employees and about turnover before completing the questionnaire.

In this survey, we will be asking about headcount (filled and open positions), number of employees leaving the organization, and reasons for employees leaving. We will be asking these questions for each of the following job categories: supervisor, wheelchair vehicle operator, dispatch, billing office, EMT, part-time EMT, paramedic, and part-time paramedic. **Headcount** refers to the number of filled and open positions for each job category at the end of 2018. Filled positions refer to the number of employees in each job category that were on payroll at the end of 2018. For each job category, the number of filled positions should be added to the number of open positions at the end of 2018 to determine the total headcount.

Thank you,

Greg Lawton **Avesta**
866-342-4280 office
330-342-1380 direct line
330-310-3897 cellular
www.avestacorp.com

Copyright © 2018 American Ambulance Association, All rights reserved.

These contacts were obtained from the American Ambulance Association member database.

Our mailing address is:

American Ambulance Association
8400 Westpark Dr.
Second Floor
McLean, VA 22102

Appendix B. AAA / Avesta 2019 Ambulance Industry Employee Turnover Study: Word Version of Qualtrics 2019

Survey General Instructions

The American Ambulance Association is partnering with Avesta, a long-time ambulance industry partner and Human Resource support firm, to conduct our second annual industry turnover study. Through the use of this survey, our intent is to comprehensively collect and analyze ambulance industry employee turnover data so as to produce a report that provides useful and actionable data. We are inviting EMS organizations to participate in the study. The study will be conducted and managed by Dennis Doverspike, PhD, and the Center for Organizational Research at The University of Akron. Each response will be strictly confidential.

The purpose of the study is to better quantify and understand the reasons for turnover at nearly every organizational level within the EMS Industry. Participating organizations will have full access to the final report at no charge.

NOTE: DIFFERENT COMPUTERS WILL DISPLAY EACH PAGE IN A DIFFERENT MANNER. IF NECESSARY, BE SURE TO SCROLL DOWN TO THE CONTINUE AT THE BOTTOM OF THE PAGE.

Thank you very much for your time and support. Please start with the survey now by clicking on the Continue button below.

Why participate in the survey?

1. **Educate elected officials, municipalities, and healthcare clients.** The insight gained from this survey can help influence the actions, policies, or decisions of officials regarding funding. Specifically, this important data can help validate the critical staffing challenges faced by the EMS industry. This year, we added queries to the survey to better understand the cost of turnover.
2. **This study is critical to gaining insight into combating staff shortages.** AAA / Avesta 2019 Ambulance Industry Employee Turnover Study aims to yield the information that organizations need to identify and benchmark their turnover challenges. Last year's survey generated the largest response to a turnover survey ever published for the private EMS industry.
3. **Participating organizations will have full access to the final report at no charge.** The comprehensive results of the study will be shared exclusively, and at no cost, with each participating organization. Shorter write-ups and summaries of

the results may be shared at conferences or published in relevant periodicals or journals.

Before You Start

It is recommended that you gather information about your employees and about turnover / onboarding costs before completing the questionnaire. If you gather the various requested information before completing the survey, it should take less than 20 minutes to complete the survey.

In this survey, we will be asking about headcount (filled and open positions), number of employees leaving the organization, and reasons for employees leaving. We will be asking these questions for each of the following job categories: supervisor, wheelchair vehicle operator, dispatch, billing office, EMT, part-time EMT, paramedic, and part-time paramedic. Headcount refers to the number of filled and open positions for each job category at the end of 2018. Filled positions refer to the number of employees in each job category that were on payroll at the end of 2018. For each job category, the number of filled positions should be added to the number of open positions at the end of 2018 to determine the total headcount.

In addition, we will be asking for the costs associated with turnover in terms of recruiting, screening, and training for full-time EMTs and paramedics. Finally, there is a question regarding lost revenue due to staff shortages.

Additional Instructions

Make sure you have approximately 45 minutes to complete this survey. You should try to complete the survey in one sitting. You may or may not be able to come back to your answers once you exit the survey; whether you can return depends on how your individual computer is set up, which we cannot control. For sure, if you are working on a computer shared by others, you will need to complete the whole survey in one sitting. You should be able to complete the survey on a variety of devices, including desktops, laptops, tablets, and even smart phones. However, the smaller the device, the more difficult and time consuming it may be to complete the survey.

By clicking on the Continue button below, you understand the following:

- You have been invited by The American Ambulance Association, Avesta, and The University of Akron - Center for Organizational Research to complete this survey.
- You are the person invited to complete this survey, and you will complete it honestly and accurately.
- You will not copy, distribute, share, or save any portion of this survey. You will not disclose the contents to any person except personnel authorized by The University of Akron - Center for Organizational Research and Avesta.

Basic Information

What is your position in the organization?

- ☐ HR Clerk or Assistant
- ☐ HR Manager
- ☐ HR Executive
- ☐ Manager (Other than HR)
- ☐ Executive (Other than HR)
- ☐ President, CEO, or Owner
- ☐ Other

Which of the following best describes the type of ambulance services you offer:

- ☐ Public Sector – Fire Department
- ☐ Public Sector – Stand Alone EMS
- ☐ Private Sector – For Profit
- ☐ Private Sector – Not for Profit or Nonprofit
- ☐ Hospital-Based
- ☐ Other

Where does your company provide services (check all that apply)?

- ☐ Midwest
- ☐ Northeast
- ☐ South and Southeast except Texas
- ☐ Texas
- ☐ Southwest
- ☐ West and Rocky Mountain
- ☐ Canada

What is the total number of employees at your organization?

- ☐ 1-99 employees
- ☐ 100-199 employees
- ☐ 200-499 employees
- ☐ 500-799 employees
- ☐ 800+ employees

For the following questions, we will be asking about headcount (filled and open positions), number of employees leaving the organization, and reasons for employees leaving. We will be asking these questions for each of the following job categories: supervisor, dispatch, billing office, EMT, part-time EMT, paramedic, part-time paramedic, and wheelchair vehicle operator.

Headcount: Headcount refers to the number of filled and open positions for each job category at the end of 2018. Filled positions refer to the number of employees in each job category that are on payroll at the end of 2018. For each job category, the number of filled positions should be added to the number of open positions at the end of 2018 to determine the total headcount.

Although it is not necessary, we recommend trying to gather the required information about your employees before completing the questionnaire.

Supervisors

Do you have any Supervisors? If you do, please fill out the following questions on this page. If you do not, please skip this section (about Supervisors) and proceed to the next section of the survey (about Dispatch Employees).

What was the headcount (filled and open positions) for Supervisors at the end of 2018?

How many Supervisors left your organization in 2018?

How many Supervisors left for voluntary reasons?

How many Supervisors left for involuntary reasons?

For the Supervisors who left voluntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Dissatisfaction with pay and/or benefits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with career advancement opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Career or occupation change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moved out of area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For the Supervisors who left involuntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Discharged due to poor performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discharged due to behavioral issue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laid off due to merger, downsizing, or restructuring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Dispatch Employees

Do you have any Dispatch Employees? If you do, please fill out the following questions on this page. If you do not, please skip this section (about Dispatch Employees) and proceed to the next section of the survey (about Billing Office Employees).

What was the headcount (filled and open positions) for Dispatch Employees at the end of 2018?

How many Dispatch Employees left your organization in 2018?

How many Dispatch Employees left for voluntary reasons?

How many Dispatch Employees left for involuntary reasons?

For the Dispatch Employees who left voluntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Dissatisfaction with pay and/or benefits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with career advancement opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Career or occupation change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moved out of area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For the Dispatch Employees who left involuntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Discharged due to poor performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discharged due to behavioral issue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laid off due to merger, downsizing, or restructuring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Billing Office Employees

Do you have any Billing Office Employees? If you do, please fill out the following questions on this page. If you do not, please skip this section (about Billing Office Employees) and proceed to the next section of the survey (about Full-Time EMTs).

What was the headcount (filled and open positions) for Billing Office Employees at the end of 2018?

How many Billing Office Employees left your organization in 2018?

How many Billing Office Employees left for voluntary reasons?

How many Billing Office Employees left for involuntary reasons?

For the Billing Office Employees who left voluntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Dissatisfaction with pay and/or benefits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with career advancement opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Career or occupation change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moved out of area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For the Billing Office Employees who left involuntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Discharged due to poor performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discharged due to behavioral issue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laid off due to merger, downsizing, or restructuring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Full-Time EMTs

Do you have any Full-Time EMTs? If you do, please fill out the following questions on this page. If you do not, please skip this section (about Full-Time EMTs) and proceed to the next section of the survey (about Part-Time EMTs).

What was the headcount (filled and open positions) for Full-Time EMTs at the end of 2018?

How many Full-Time EMTs left your organization in 2018?

How many Full-Time EMTs left for voluntary reasons?

How many Full-Time EMTs left for involuntary reasons?

For the Full-Time EMTs who left voluntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Dissatisfaction with pay and/or benefits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with career advancement opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Career or occupation change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moved out of area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For the Full-Time EMTs who left involuntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Discharged due to poor performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discharged due to behavioral issue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laid off due to merger, downsizing, or restructuring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How much does it cost you to recruit or attract a new EMT (e.g., job fairs, payments to recruiters and consultants, and posting job notices)?

How much does it cost you to screen and select a new EMT (e.g., the cost of background checks, drug tests, physical ability tests, and interviews)?

How much does it cost you to onboard and train a new EMT (e.g., the cost of engagement, orientation, company specific training, and custom equipment and uniforms)?

Part-Time EMTs

Do you have any Part-Time EMTs? If you do, please fill out the following questions on this page. If you do not, please skip this section (about Part-Time EMTs) and proceed to the next section of the survey (about Full-Time Paramedics).

What was the headcount (filled and open positions) for Part-Time EMTs at the end of 2018?

How many Part-Time EMTs left your organization in 2018?

How many Part-Time EMTs left for voluntary reasons?

How many Part-Time EMTs left for involuntary reasons?

For the Part-Time EMTs who left voluntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Dissatisfaction with pay and/or benefits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with career advancement opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Career or occupation change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moved out of area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For the Part-Time EMTs who left involuntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Discharged due to poor performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discharged due to behavioral issue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laid off due to merger, downsizing, or restructuring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Full-Time Paramedics

Do you have any Full-Time Paramedics? If you do, please fill out the following questions on this page. If you do not, please skip this section (about Full-Time Paramedics) and proceed to the next section of the survey (about Part-Time Paramedics).

What was the headcount (filled and open positions) for Full-Time Paramedics at the end of 2018?

How many Full-Time Paramedics left your organization in 2018?

How many Full-Time Paramedics left for voluntary reasons?

How many Full-Time Paramedics left for involuntary reasons?

For the Full-Time Paramedics who left voluntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Dissatisfaction with pay and/or benefits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with career advancement opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Career or occupation change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moved out of area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For the Full-Time Paramedics who left involuntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Discharged due to poor performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discharged due to behavioral issue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laid off due to merger, downsizing, or restructuring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How much does it cost you to recruit or attract a new Paramedic (e.g., job fairs, payments to recruiters and consultants, and posting job notices)?

How much does it cost you to screen and select a new Paramedic (e.g., the cost of background checks, drug tests, physical ability tests, and interviews)?

How much does it cost you to onboard and train a new Paramedic (e.g., the cost of engagement, orientation, company specific training, and custom equipment and uniforms)?

Part-Time Paramedics

Do you have any Part-Time Paramedics? If you do, please fill out the following questions on this page. If you do not, please skip this section (about Part-Time Paramedics) and proceed to the next section of the survey (about Wheelchair Vehicle Operators).

What was the headcount (filled and open positions) for Part-Time Paramedics at the end of 2018?

How many Part-Time Paramedics left your organization in 2018?

How many Part-Time Paramedics left for voluntary reasons?

How many Part-Time Paramedics left for involuntary reasons?

For the Part-Time Paramedics who left voluntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Dissatisfaction with pay and/or benefits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with career advancement opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Career or occupation change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moved out of area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For the Part-Time Paramedics who left involuntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Discharged due to poor performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discharged due to behavioral issue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laid off due to merger, downsizing, or restructuring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Wheelchair Vehicle Operators

Do you have any Wheelchair Vehicle Operators? If you do, please fill out the following questions on this page. If you do not, please skip this section (about Wheelchair Vehicle Operators) and proceed to the next section of the survey.

What was the headcount (filled and open positions) for Wheelchair Vehicle Operators at the end of 2018?

How many Wheelchair Vehicle Operators left your organization in 2018?

How many Wheelchair Vehicle Operators left for voluntary reasons?

How many Wheelchair Vehicle Operators left for involuntary reasons?

For the Wheelchair Vehicle Operators who left voluntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Dissatisfaction with pay and/or benefits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissatisfaction with career advancement opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Career or occupation change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Moved out of area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For the Wheelchair Vehicle Operators who left involuntarily, please rate the extent to which each of the following reasons were reported:

	Very Rarely	Rarely	Occasionally	Frequently	Very Frequently
Discharged due to poor performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discharged due to behavioral issue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laid off due to merger, downsizing, or restructuring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Overall Employees

In terms of the total percentage of employees who left your organization in 2018, what percentage left within:

0-3 months of initial employment	0
4-6 months of initial employment	0
7-12 months of initial employment	0
1-2 years of initial employment	0
2+ years of initial employment	0
Total	0

General Organization Questions

Does your organization use any pre-employment testing when hiring entry level workers?

- ☐ Yes
- ☐ No

Does your organization conduct any type of annual or regular attitude survey with employees?

- ☐ Yes
- ☐ No

In general, does your organization pay:

- ☐ Below market
- ☐ At market
- ☐ Above market

Can you estimate your annual lost revenue due to staff shortages?

Personal Information

If you would like to receive a copy of the report and be entered into a drawing to win an iPad mini, please fill out the following contact information.

Your Name:

Your Email Address:

Your Phone Number:

Organization Name: