Center for RURAL Pennsylvania

A LEGISLATIVE AGENCY OF THE PENNSYLVANIA GENERAL ASSEMBLY

Survey of Pennsylvania Emergency Medical Services Agencies

July 2022

In late 2021, the Center for Rural Pennsylvania worked with the Pennsylvania Emergency Health Services Council (PEHSC) and its emergency medical services to conduct a statewide, online survey of emergency management agencies.

Key findings:

22.5 Average number of rural emergency providers per agency. The statewide average is 38.8 providers.

2,009 Average number of calls that rural agencies received in 2020, a decrease of 3 percent from 2019.

52 Percent of rural agencies that had a net decrease in providers over the previous 24 months, compared to 43 percent statewide.

38 Percent of rural agencies have programs to retain providers. Statewide, 46 percent have some kind of retention programs.

44 Percent of rural agencies that had a budget deficit for at least one of the previous three years. Statewide, 53 percent of agencies had a deficit for at least one of the previous three years.

77 Percent of rural agencies received COVID relief funds compared to 85 percent of agencies statewide.

2 Top reasons why providers leave agencies are low compensation and job demands.

Defining Agency and Provider

As you read the following results, it's important to know how agency and provider are defined.

- **Agency**: A local organization that oversees the delivery of emergency medical services (EMS) to people who are suffering a health crisis. These organizations may be part of a fire company, independent nonprofit organization, or hospital, or municipally owned. An agency must be licensed by the state to provide specific types of services and transportation and oversees the activities of providers.
- **Provider**: An individual who provides hands-on EMS and transportation. Providers are certified individuals and could be emergency medical technicians (EMT), paramedics, or prehospital registered nurses, to name just a few. Providers may be volunteers or paid employees of an agency.

Survey Details and Methods

Starting in October 2021, the Center sent an electronic survey to directors of 744 EMS agencies. The email addresses came from PEHSC. By December 2021, a total of 389 directors responded, for a response rate of 52 percent and a margin-of-error of plus/minus 3.44.

Among the agencies that responded, 290 (75 percent) identified the county(s) in which they provided services. The focus of this report is on those 290 agencies, which were grouped into the following three categories:

1. Rural Agency: An agency whose service area is in a rural county (132 agencies or 45 percent).
2. Urban Agency: An agency whose service area is in an urban county (135 agencies or 47 percent).
3. Mixed Agency: An agency whose service area is in both rural and urban counties (23 agencies or 8 percent).

The Center used its rural county definition to identify rural and urban counties. For ease of reading, urban and mixed agencies were combined and compared to rural agencies. In addition, two coding changes were made to assist in the comparisons:

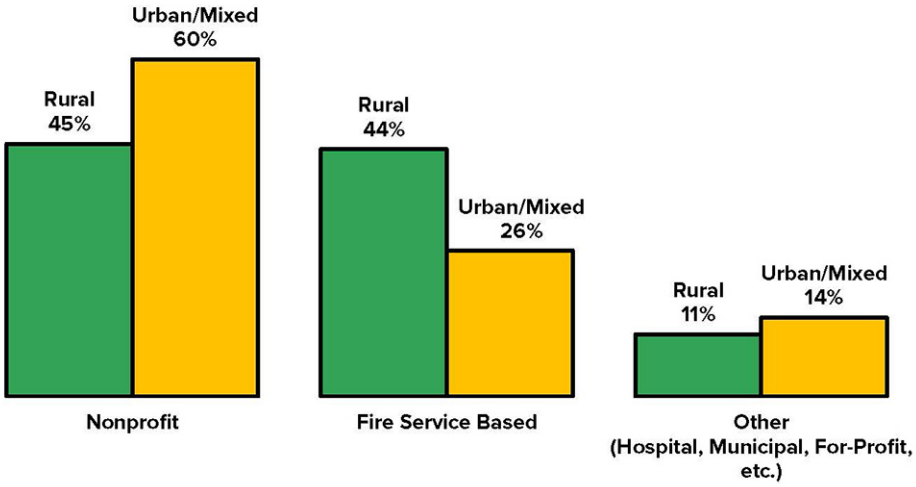
1. In the section on recruitment and retention, the only agencies included in the analysis were those that answered both questions on the change in the number of providers that joined the agency and the number of providers who left the agency.
2. In the section on dispatches and responses, only agencies that reported the number of dispatches and responses for each of the three years were included in the analysis.

Agency Snapshot

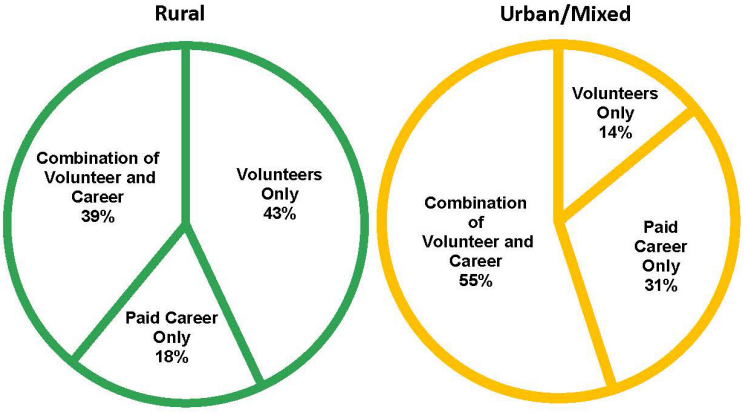
Among rural agencies, 45 percent are nonprofit organizations and 44 percent are part of a fire company. The remaining 11 percent are a mix of hospital-based, municipal, and other agencies. The top two types of licenses held by rural agencies are Basic Life Support (73 percent) and Quick Response Services (42 percent) (an agency could report having multiple licenses).

Among urban/mixed agencies, 60 percent are nonprofit organizations, 26 percent are part of a fire company, and 14 percent are a mix of other types of organizations. The top two types of licenses are Basic Life Support (78 percent) and Advanced Life Support (71 percent).

Types of Rural and Urban/Mixed Emergency Medical Service Agencies



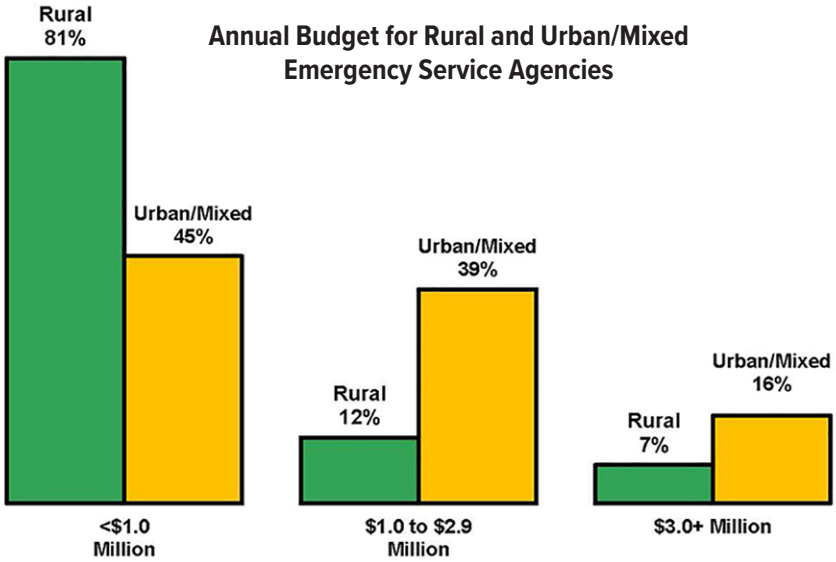
Types of Rural and Urban/Mixed Agency Staffing



Staffing

Among rural agencies, 43 percent are staffed primarily by volunteers and 39 percent are staffed by a combination of paid providers and volunteers. Approximately 18 percent of rural agencies are staffed by paid career providers only. Among urban/mixed agencies, 55 percent are staffed by a combination of paid providers and volunteers, 14 percent are staffed by volunteers only, and 31 percent are staffed by paid career providers only.

Annual Budget for Rural and Urban/Mixed Emergency Service Agencies



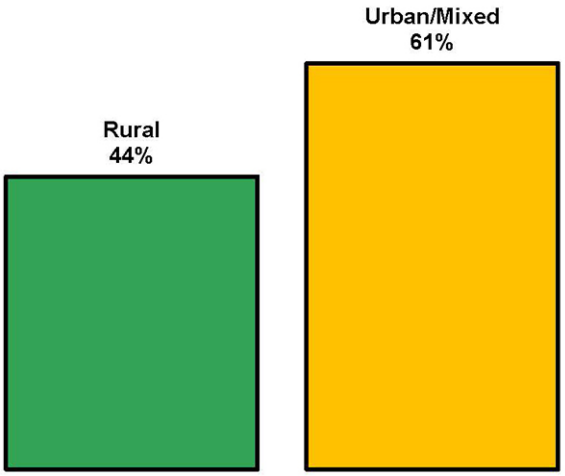
Finances

Eighty-one percent of rural agencies and 45 percent of urban/mixed agencies have annual budgets under $1.0 million.

Over the previous three years (2018 to 2020), 56 percent of rural agencies reported having no budget deficits and 44 percent reported having one or more budget deficits during this period. Among urban/mixed agencies, the opposite was true—39 percent reported having no deficits and 61 percent reported having at least one or more deficits.

Asked if municipalities within their service areas contributed to their operating budget, 47 percent of rural and 32 percent of urban/mixed agencies said they did not receive municipal funding.

One or More Budget Deficits within Previous 3-Years



Provider Snapshot

On average, rural agencies have 21 providers and urban/mixed agencies have 50 providers. The rural providers are generally older than the urban/mix providers as 54 percent of rural providers are under age 40 compared to 62 percent of urban/mixed providers. When it comes to gender, 66 percent of providers are male and 34 percent are female for both rural and urban/mixed agencies.

21 = Average Number of Rural Providers
50 = Average Number of Urban/Mixed Providers

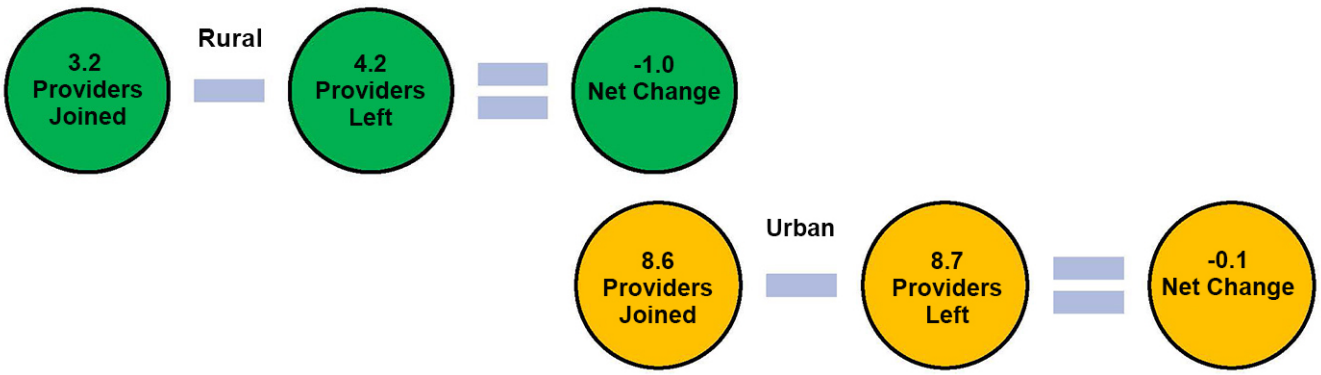
Change in Providers

On average, between December 2019 and November 2021, 3.2 providers joined rural agencies and 4.2 providers left rural agencies. This accounted for an average net loss of 1 provider.

On average, among urban/mixed agencies during this same period, 8.6 providers joined and 8.7 providers left the agencies, for an average net loss of 0.1 provider.

These averages obscure some of the more nuanced changes that occurred. For example, 25 percent of rural agencies had a net increase in providers, 22 percent had no net change, but 52 percent had a net decrease in providers. Among urban/mixed agencies, 42 percent had a net increase in providers, 22 percent had no net change, and 36 percent had a net decrease.

Average Number of Rural and Urban/Mixed Providers that Have Joined and Left EMS Agencies Over the Past 24 Months

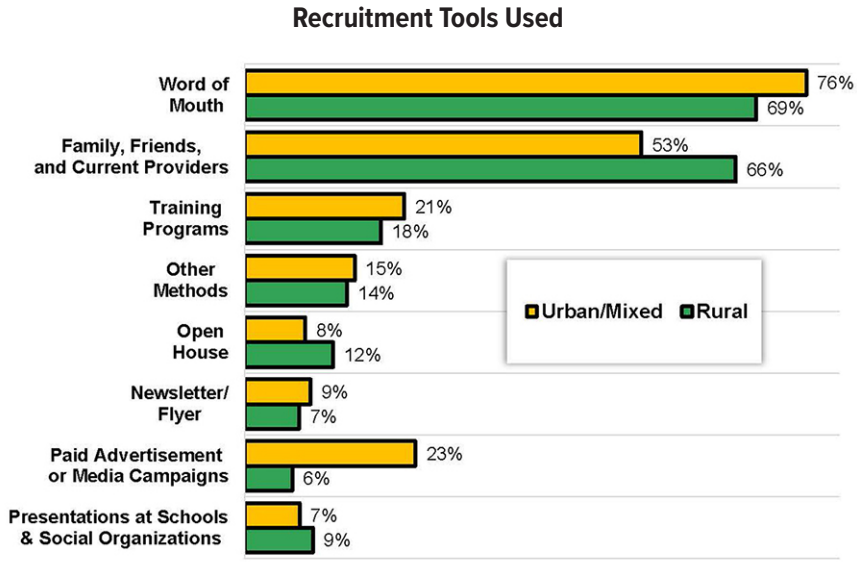


Recruitment

Agencies were asked what their top three methods were for recruiting new providers. For both rural and urban/mixed agencies, the top two methods were identical: word-of-mouth and family and friends of current providers.

Retention

Agency directors were asked if they had a program or incentive to retain providers. Thirty-eight percent of rural agencies had programs or incentives and 53 percent of urban/mixed agencies had programs or incentives.

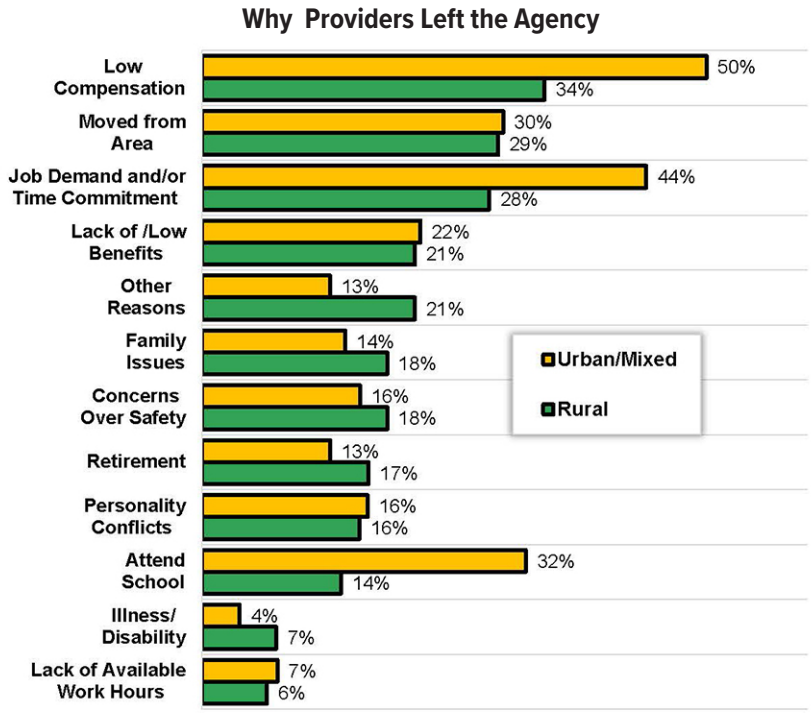


Among those agencies, the top three programs and incentive were:

Rural Agencies		Urban/Mixed Agencies	
70%	Paid training	79%	Annual pay raises
58%	Uniform allowance	76%	Uniform allowance
53%	Annual pay raises	66%	Paid training

Ideal Recruitment and Retention Tools

Agencies were asked to identify their top two ideal recruitment and retention tools. Rural agencies identified EMT training for all first responders statewide (50 percent) and provider tax credits (46 percent). Urban/mixed agencies said the same in reverse order: tax credits (41 percent) and statewide EMT training for all first responders (29 percent).



Why Providers Left

Agencies were asked to identify the top three reasons why providers leave the agency. Rural agencies identified compensation, benefits, and job demands/ time commitments. Urban/ mixed agencies also identified compensation and job demands/ time commitments, as well as providers leaving to attend school.

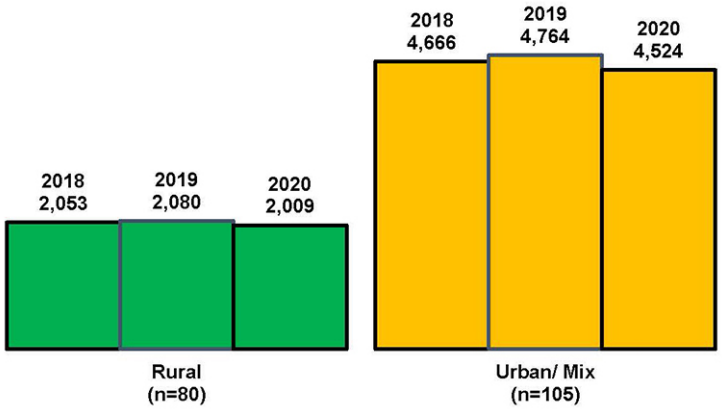
Responding to Calls

In 2020, rural agencies received 2,009 dispatches for service and responded to 1,926, on average. This means 83 dispatches (4 percent) were answered by another service agency.

Urban/mixed agencies received 4,524 dispatches for service and responded to 4,420, on average. This means 104 dispatches (2 percent) were answered by another service agency.

From 2019 to 2020, rural agencies had a 3 percent decrease in dispatches and a 5 percent decrease in the number of responses, and urban/mixed agencies had a 5 percent decrease in dispatches and a 3 percent decrease in the number of responses.

Average Number of Dispatches for Service per EMS Agency, 2018, 2019, 2020



Strategic Planning

Fifty-four percent of rural agencies and 67 percent of urban/mixed agencies said they had a strategic plan. The majority of both rural and urban/mixed agencies (87 percent) said their plan is updated either annually or every other year.

Both rural and urban/mixed agencies cited many similarities in their plan contents, including vehicle and equipment updates and replacements, and financial sustainability. Some differences involved provider training and agency relationships with municipalities. Seventy-one percent of rural agencies said their plans included provider training compared to 58 percent of urban/mixed agencies. Sixty-five percent of rural agencies included their relationship with municipalities in their service area, compared to 84 percent of urban/mixed agencies.

Agency Opinions on Issues

Both rural and urban/mixed agencies had nearly identical attitudes when it came to municipal relationships, problems with recruitment, and regionalization. For example:

- 84 percent of rural agencies and 88 percent of urban/mixed agencies agreed or strongly agreed that they have a good working relationship with municipalities in their service areas.
- 77 percent of rural agencies and 71 percent of urban/mixed agencies disagreed or strongly disagreed that their agency is not experiencing difficulties recruiting and retaining providers.

Opinions of Agencies Statewide

	Disagree	Neither Disagree nor Agree	Agree
Our agency has a good working relationship with the municipalities in our primary response area.	7%	7%	85%
Our agency is not experiencing difficulty recruiting and retaining providers.	74%	13%	13%
Within the next five years, our agency will likely be less independent and will consider participating in a Department of Health.	23%	51%	26%
We are more concerned/focused on the financial health of our agency than recruitment and retention.	40%	39%	21%
Our agency supports regionalization of EMS services to create a financially sustainable model to ensure timely EMS emergency response.	23%	41%	36%

It is interesting to note that both rural and urban/mixed agencies said they were neither supportive nor unsupportive of their agency becoming less independent in the next five years. They also were ambivalent when it came to regionalization.

Discussion

The data from the survey suggest that the majority of rural and urban/mixed agencies are being squeezed financially and are having difficulty recruiting and retaining providers. Overcoming these challenges will not be easy.

On a positive note, most agencies are able to respond to calls and a significant number of agencies are able to offer some type of recruitment and retention incentives to providers. In addition, most agencies have a strategic plan that allows them to navigate through funding and staffing storms.

Looking to the future, many agencies will have to rely on different methods for recruitment and retention and will have to continue to seek new funding sources.

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