

APCO) PROJECT RETAINS

The Compiled Report

Synthesizing Information from the Effective Practices Guide &

RETAINS Next Generation

August 2009

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Introduction

APCO Project RETAINS began in 1999 as a taskforce and evolved as an active committee, releasing the Effective Practices Guide (EPG), Technical Report and Research Report in August 2005 in participation with the University of Denver Research Institute. The Staffing and Retention Toolkit was released at the same time. The focus of this report was to provide managers with tools and strategies to increase the effectiveness of their own management practices, thereby improving staffing, retention and employee satisfaction in public safety communications centers throughout the country (APCO, 2005). The EPG focused on the main themes of the research: Staffing, Retention and Employee Satisfaction. Effective practices and research were offered in the following areas:

- Staffing
- Overtime and retention
- Recruitment, screening and selection qualified staff
- Shift management and employee satisfaction
- Turnover and retention rates
- Job complexity
- Compensation and benefits
- Working conditions
- Center performance
- Orientation and training
- Recognition and appreciation

During the course of research, the national turnover rate for public safety communications was determined to be 17% for the sampled centers (retention rate of 83%). An industry comparison with nurses and teachers was made to illustrate the gravity of this issue; the average turnover rate for nurses and teachers was 15%.

With the realization that information needs to be reevaluated every four to five years, the next generation of the RETAINS research was launched. It is important to note that technological developments require a constant forward movement with a refreshment and reevaluation of data. APCO worked in conjunction with George Mason University Center for Social Science Research. In spring 2008, the RETAINS Next Generation report was released. The intent of this report was to build upon the previous research on staffing and retention issues in communications centers.

The specific factors that were a focus in the Next Generation report included:

- Current staffing challenges facing communications centers
- Update of retention rates and analysis of the conditions that affect calltaker and dispatcher retention
- Analysis of organizational commitment and psychological distress reported among calltakers and dispatchers
- The degree to which Project RETAINS is known and used by communications centers
- Definition of an optimal workload for the dispatch position
- Guidelines for staffing a dispatch position based on an evaluation of how many units or radio channels a dispatcher can effectively handle.

The intent of this deliverable is to synthesize the findings of both reports to assist public safety communications professionals.

Economy

The recent economic downturn has provided some benefits to the public safety communications industry. When there are fewer employment opportunities, there is a larger number of candidates. During a recession, there are many people out there looking for job. However, more does not equal better. Some observations have been that rather than hiring one out of every 10 people, the viable candidate in the larger group will create a one out of 20 hiring

percentage. This creates more work for the hiring entity and necessitates more selective screening. This following the effective practice (EP) from the first generation study: don't hire maybes!

Another point to consider with the economy is that it should be a variable for which to account, but should not become a main driver in an agency's hiring strategy. The economy is cyclical and dynamic. The candidates who look for employment when the economy is at a low point may be overqualified but still need a job. While this may initially seem like an ideal situation for a center, don't forget that these are the people most likely to leave once the economy turns around. They may learn to love the job, but that will most likely not be the case. If your agency hires one of these individuals, realize that it is a calculated risk; only the manager/hiring authority for that agency can decide if this is a risk worth the investment of time and money.

Salary

In the 2005 study, factors affecting retention and satisfaction were identified:

Factors affecting retention:

1. Fully staffed (all authorized positions filled)
2. Monthly overtime hours
3. Job complexity
4. Hourly base pay
5. Working conditions

Factors affecting satisfaction:

1. Center performance (management)
2. Preparation and ongoing training
3. Appreciated by management
4. Shift selection process

5. Effective mentoring of new trainees
6. Appreciated by immediate supervisor
7. Screening and application process
8. Appreciated by the media

Hourly base pay was identified as the number four predictor of retention. After completing the next generation study, the results show that hourly base pay (wages) were still an issue. Half of full-time employees (excluding those whose primary role was supervisor) earn a base pay of \$37,000 or more (the median). According to the Bureau of Labor Statistics data on dispatcher wages from May 2007, the median national wage was \$32,660 and the average was \$34,060. The median hourly wage was \$15.70, and the average was \$16.38. Average wages varied from \$14.76 among dispatchers at ambulatory health care services to \$18.03 for state employees. For the highest paying states, average hourly wages reached \$23.66 in California (U.S. Department of Labor, 2007).

Average base pay was found to be significantly lower in small centers (\$32,000) compared with medium (\$43,000) and large centers (\$45,000). This difference may be expected due to the fact that large employers tend to pay more than smaller ones (Hope and Mackin, 2007), and is probably also related to the higher cost of living in larger population centers. Base pay was not significantly correlated with call volume per employee.

The variation in wages from different types of agencies (e.g., local vs. state) and across agencies of the same type (e.g., different counties in the same state) can be a source of discontent for some employees. Many interviewed dispatchers mentioned the disparity in pay between their position and similar 9-1-1 positions in neighboring jurisdictions or with similar positions within

their city or county. Many also felt that their pay should be higher given the responsibility involved, the aggravation of dealing with angry callers or the stress involved in dealing with emotionally charged situations.

In some cases, political factors influence employees' perceptions about pay, such as one center in which the same local 9-1-1 board members who repeatedly proposed dispatcher pay increases later vetoed those pay increases at county-level budget meetings, according to interviews. The increased expectation of raises led to more anger at leaders when the increases were vetoed. A similar problem arises when 9-1-1 agencies with different pay scales merge; several dispatchers interviewed mentioned their displeasure with reductions in pay after a merger.

Other salary issues revealed in interviews include anger at salaries for new hires that are higher than that earned by more senior staff, across-the-board frozen pay rates and the lack of performance or seniority raises. Some staff with seniority believed they would never reach their maximum salary step since they received only cost-of-living allowance adjustments. A number of communications center employees are attracted by the high additional wages that can be earned from working overtime. One interviewed supervisor mentioned that she earned as much as \$30,000 to \$50,000 extra per year from overtime. Further, she felt she could not afford to change jobs, because she would have such a large drop in income. Based on dispatcher interviews, many employees voluntarily work considerable amounts of overtime—as much as 20 hours per week—which significantly affects their income and employment decisions. An

important factor to always consider is that pay will vary by dynamics of the agency, service area and service population.

The recession may affect centers directly and indirectly. Housing costs and employment rates vary by state/jurisdiction. This makes for a tighter budget. Many people are not buying houses and spending as much money in the same manner as before the recession. Those states that collect monies from sales or property taxes are feeling the pinch from this direction. On the other side of the issue, many people are not voluntarily leaving their positions. RETAINS did not address how this directly affected the behavior of employees (are they more or less compliant) and what this has done to collective bargaining/unions.

Next Generation in the Communications Center

- New skill sets will be required in NG9-1-1 settings. It is unknown how recruitment or retention will be affected.
- There are some virtual communications centers, but there are no true “work from home” situations. NG9-1-1 in communications centers may facilitate teleworking, potentially allowing for the receipt and processing of 9-1-1 calls from alternate locations. However, this is dependent on the organizational makeup.
- Time is of the essence to understand what NG9-1-1 is and how it affects a communications center. Preparations need to be proactive—rather than reactive—to reduce the negative impact.

The emerging technologies associated with Next Generation 9-1-1 will affect the recruitment and retention potential of personnel within the field of emergency communications. Although predicting specific trends within the industry prior to NG9-1-1 may be premature, several areas will present unique opportunities that communications center managers should consider in their future path strategy.

The NG9-1-1 environment is based on IP technology. The use of IP will allow municipalities to explore nontraditional work locations and schedules that were previously not possible. Potential exists for jurisdictions to route calls to locations other than the communications center to be processed. With the proper security measures and management of personnel and technology, the functionality of the calltaker or dispatcher can be driven from within remote virtual environments. Offering the ability to work from, or closer to, home may in some instances increase the retention and recruitment of personnel who are challenged by the demands of a 24/7 industry.

The impact of the recent economic crisis will be felt throughout the next generation of workers. More families are now refocusing their attention on the need to pursue and obtain employment that will provide financial security and benefits over a long period of time. Although all occupations are at risk of downsizing, emergency services and 9-1-1 traditionally offer reasonable longevity and benefits. It is likely that younger generations of workers will consider this type of stability when they are assessing their career path. The economy, therefore, offers a unique opportunity to recruit from a larger pool of potential applicants. An aggressive advertising campaign that stresses these advantages should be engaged as soon as possible.

The technological sophistication of NG9-1-1 may in some cases seem overwhelming to the traditional communications center worker, who will be expected to endure a lengthy evolution to new software platforms that are being introduced within the industry. It is, therefore, essential that communications center managers attempt to recruit applicants that are already adept in the many methods of multimedia communications available today. Integrating new staff members

who are accustomed to multitasking with text, video and verbal communication skills will provide balance within the traditional E-9-1-1 workforce as it acclimates to the many changes ahead.

Psychological Distress

Emotional distress of employees is important to consider for both the effect on the well-being of the employee and its consequences in the workplace. Consequences of untreated psychological distress for employees may include serious health and mental health problems (Marchand et al: 2005b). Alternately, Staw, Sutton and Pelled (1994) summarize some of the findings related to the effects of positive emotion on workplace performance, which include increased task activity and persistence and enhanced cognitive functioning. Other effects include enhanced interpersonal attractiveness (i.e., a halo effect by which people with positive emotions are evaluated more positively by others) and increased social influence on others. Further, they note that employees who are in good moods may be more likely to help others. These authors found that employees with more positive emotions received more favorable supervisor evaluations and greater pay after 18 months and received greater supervisor and co-worker support.¹

It is worth noting that some of the same factors found to predict employee commitment emerge as significant in our analysis of the factors that predict psychological distress. Here again, **perceived recognition** for the work that they do plays a key role, and any gains organizations can make in improving this aspect of the job will likely pay off in terms of worker commitment and effectiveness, as well as in their personal well-being.

Exposure to emotional strain also plays a key role in how an employee will handle psychological distress. Interventions designed to reduce emotional distress may be targeted to the individual employee or to the organizational level. Interventions designed to help individuals deal with stress may include programs to increase resilience and promote health and well-being (e.g., fitness programs, diet and nutrition programs, relaxation, stress management and psychological counseling). Organizational-based interventions (e.g., increasing worker control, reducing the workload or improving training) may also hold potential (Danna and Griffin, 1999), although conclusive evidence of the effectiveness of such approaches for reducing worker emotional stress is lacking (Schaufeli, 2004; Reynolds, 1997).

Thus, it is prudent to carefully evaluate the sources of stress and the formal and informal means of dealing with stress within centers. Our survey results found that formal coping resources (employee assistance programs and Critical Incident Stress Management) are not uniformly available within agencies. Although formal coping resources provided by the agency did not emerge as significant predictors, formal and less formal support for work-related stress is something that needs to be built into the work environment. One supervisor describes the following responses to stressful incidents:

“We do try to be very cognizant of that. If it's a big incident we try to pull them from their positions as soon as they have finished the call. I will bring them in here or we'll take them outside... or into the break room ‘so what do you think?’, you know, ‘what are you feeling?’ We do offer counseling if they need it, and most of all we encourage them to talk to their peers. I think that vocalizing what it

is that you experienced, what you feel, is the only way that you are going to be able to comprehend that.”

Psychological distress has a strong correlation to an employee’s emotional intelligence.

“Emotional intelligence (EI) is the ability to interpret, understand and manage one’s own and others’ emotions” (McKerren, 2009, pg. 34). While EI is not the total measure of success for a potential candidate in a communications center, consideration must be given to this parameter.

“Learning to control one’s emotions is essential for telecommunicators, and agencies have a lot to gain from hiring the best suited telecommunicators” (McKerren, 2009, pg. 35).

Communications centers are a multitasking environment requiring a higher degree of skill. Care, compassion, skills, knowledge and ability are just some of the capabilities needed by an effective telecommunicator. Using EI and understanding the impact of psychological distress are important; telecommunicators must be able to take control of situations presented by callers and what is happening around them. As NG technology takes a stronger hold in communications centers across the U.S., telecommunicators will need to be able to function with multimedia stress. Emergency calls will soon come in the form of video, text and other mixed media. These situations call for the telecommunicator to have an even greater command of their response(s) to callers and co-workers.

During recruitment efforts, non-traditional candidate pools should be approached for employment. An agency should always consider appropriate measures to ensure that candidates are viable. These measures should be determined by the agency depending upon the services rendered and agency policies. Gauging EI and psychological distress are innovative approaches to recruitment. They can be effective tools if understood, but there is no sugarcoating on the

requirements. A telecommunicator must meet the basic skills of this position. However, this is only the beginning. Managers, supervisors and CTOs are tasked with determining the compatibility level of the new hire with the agency. Suggestions for effective recruitment and selection are offered in the APCO Effectives Guide and industry professionals are encouraged to network with one another to discover other potential solutions.

Dispatcher Position

Defining the Dispatch Position Workload and Center Size

The RETAINS NG report has devoted a number of sections addressing factors affecting dispatcher ability to serve units assigned to a dispatch position. Although the reader of the RETAINS NG report will try to discern differences in workloads by center size, agency type, even time frame of individual dispatch shifts, it is important to closely review the non-radio responsibilities of individual positions.

Table 1 (below) presents workload reported by employees, by center size. While it appears that the unit workload of a small center is much smaller than the medium and large centers, it is necessary to understand what additional functions the small center dispatcher must perform. Such duties as call-taking, Emergency Medical Dispatch (EMD), notification of tow trucks and animal control, NCIC checks, license checks², camera monitoring, answering administrative telephone lines, dealing with other radio frequencies serving public works, water departments, and interagency communication links may be part of the normal responsibilities. Further, in small agencies it may be the responsibility of the dispatcher to be the “desk person” for a police

or fire department. The person may also be responsible for monitoring the holding cells for a law enforcement agency.

The information in table 1 does not delve into the responsibilities of the dispatchers in the medium and large agencies but they may very well be limited to serving the units assigned with radio dispatching service with few or limited additional non-radio responsibilities. Leadership reviewing the information presented needs to carefully analyze the duties and responsibilities of each position within their center.

Another factor that needs to be considered when evaluating dispatcher workload is the time of day for the shift. Although, for example, a dispatcher can easily serve 25 units on an overnight shift with a steady pace of calls, that same dispatch position may not be able to effectively handle the increase in radio traffic on the day shift due to an increase in calls for such service as intrusion alarms, hold-up alarms and service to citizen calls. Effective service may be even more outside the capability of the dispatcher on the evening shift if the position is handling the dispatch of units in an urban area that typically has considerable crimes against citizens and property. Often, during these calls for service times, there won't be enough law enforcement, fire or EMS units available to cover priority calls effectively, and this situation puts additional pressure on dispatchers and responders to quickly adjust and modify responses.

	Small	Medium	Large
Average law enforcement units a dispatcher handles at one time	8	25	26
Average fire/EMS units a dispatcher handles at one time	7	27	49
Number of primary radio channels a dispatcher is responsible for	4	3	2
Number of secondary radio channels a dispatcher is responsible for	4	5	3
How many law enforcement units can a dispatcher effectively monitor	8	25	25
What is the maximum number of primary radio channels a dispatcher can effectively monitor	4	3	2
1 See Appendix A of the RETAINS NG report for a version of this table showing number of cases and statistical significance.			

	Small	Medium	Large
Budget	69%	63%	59%
Total call volume	49%	62%	55%
Desired service level	48%	65%	68%
Number of consoles	32%	47%	55%
Peak hour call volume	36%	50%	55%
Average calls per hour	31%	40%	41%
Available radio frequencies	14%	30%	41%
Average answering time	22%	28%	23%
Project RETAINS	3%	16%	9%
N = 99 small, 58 medium, 22 large			

Consolidation

There has been a national trend toward consolidation for a variety of reasons. If an agency is looking at consolidation, decision-makers need to be aware of the different types of consolidation:

- Is it just physical consolidation? (co-location)
- Is it physical consolidation of single disciplines and no job duties changing?
- Is it physical consolidation of single disciplines and job duties changing?
- Is it physical consolidation of multiple disciplines and job duties changing?
- Is the technology changing as well? New server applications ...

These different types of consolidation will mandate different approaches to staffing and retention. Many APCO members have used the RETAINS toolkit as a resource to help plan for this impending change. Good, accurate statistics are needed, including call volume and workload. Data is needed to substantiate a good staffing estimation. Although a physical consolidation may not mandate a change in job duties, other variables, such as EI or psychological distress, may be affected. Existing staff need to be prepared in a positive manner and included in any type of consolidation. A total consolidation requires learning new/different job duties; staff will be taking on more work. True volumes of work help determine how to make the work effective. Consolidating but not moving location requires that a good governance model be in place. Such questions as, “Who will be the systems administrator?” and similar issues, will need to be identified. All of these factors need to be considered to make the transition smooth.

NG9-1-1 technology will eventually force the issue of consolidation to a degree in several physical areas, for example, as areas look to bring people together under a single roof to share technology as a cost savings measure. However, the financial benefits may not be seen for a

number of years due to the complexities of consolidation. Before moving toward consolidation, leaders should prepare a sequence of events to whatever degree possible. Major change can negatively affect retention. Leaders should identify what can be done in stages in a logical sequence so retention doesn't become an issue. Incremental change may be more readily accepted by staff involved. Ideally, consolidation needs to be an evolutionary process. Consolidation is not easy, but it can be a successful undertaking with long-term planning and preparation.

Undoubtedly, in many types of consolidation, there will be losses of staff members who can't or won't be able to handle the consolidated environment. Although this can be upsetting and cause hardship, it can present an opportunity to bring in staff who do possess the needed skill set to succeed. It can also be an opportunity for motivated staff to experience job enrichment through betterment of skills and expanded job responsibilities.

Developing Our Leaders

In 2005, the number one factor impacting retention was having a center fully staffed (all authorized positions filled). This is a function of leadership. It takes time to understand the complex workings of a communications center and good leaders must continuously evolve and develop in their roles. RETAINS speaks of the importance related to initial and ongoing training. This pertains to not only telecommunicators, but leadership at all levels. Often, individuals will ascend into leadership positions due to tenure rather than assessment of management and leadership skills. Many communications professionals are very capable, but additional effective leaders are needed in the industry. In the same manner that a Communications Training Officer

(CTO) can influence the performance of a new hire, Communications Managers, Directors and other managerial communications staff can affect the morale, operations and behaviors of the staff in a communications center. Leaders set the example of what is acceptable from and expected of their staff. People will look at how centers are run and how leadership functions. These can be immense determinants in retention and satisfaction, and are not always mutually exclusive. *The translation:* leaders affect staffing and retention.

The good news: Several resources are available to help leaders develop and evolve needed skills. Basic management principles are critical, and some of the skills needed by a leader are:

- **The ability to communicate with authority**—Successful leaders know how to get their message out. The more effective you are as a speaker and a writer, the more effective you will be as a leader.
- **How to build and manage high-performance teams**—Successful leaders are able to get people to work together for the common good.
- **How to break down barriers in interpersonal negotiations**—Successful leaders are able to employ a negotiation framework that encourages a positive outcome for both parties.
- **How to enhance team performance**—Successful leaders take time to provide their team members with a realistic assessment of their performance. They know that a realistic performance assessment is critical to motivation and morale.
- **How to lead with confidence and integrity**—Successful leaders provide direction, lead by example, enable others, share power and seek a better way.
- **Make a difference within our Association and our industry**—Successful leaders need to have a broad knowledge of their industry, as well as a broad knowledge of how to lead our Association in facing the challenges of today and tomorrow (APCO Institute, 2009).

A resource available to professionals in the communications industry is the APCO Institute Leadership Certificate Program,³ which is a 12-month online program developed through a partnership with the American Management Association. The classes focus on the above topics, with a central tenet of effective communication. Leaders should seek to improve their active

listening and effective speaking skills. Active listening is when “the focus is not on the listener’s view or opinion but rather the speaker’s content” (Slaikeu, 1996, 227). Although the demands on leadership in a communications center are many, effective communication is not an area that can be overlooked.

A host of classes are available to assist leaders. Many are offered by APCO and can be viewed on the APCO Institute training page: <http://www.apcointl.com/institute/training.htm>. Courses offered through an educational institution can also provide insight.

Conclusion

This report has sought to consolidate and synthesize the information gleaned from the first Project RETAINS Report and the RETAINS NG report. The intent was to offer insight as to how the economy, salary, psychological distress, NG9-1-1 technology, consolidation and leadership development may affect staffing and retention in public safety communications centers. Although APCO does not advocate a particular position on many of these issues, the perspectives offered in this report offered are important to consider. Although it is not possible to provide exact data about workload because of the various dynamics and variables affecting communications centers across the U.S., what has become apparent is that many of the perceptions are common from center to center. As with all of the RETAINS studies and documents, the report intends to provide a starting point for public safety communications professionals to begin making needed and effective changes. This information is intended to be used in conjunction with the EPG and NG report as a guideline. To be applicable to many agencies, it cannot be much more specific.

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Endnotes

¹ These authors are careful to point out that their findings on the positive workplace outcomes of positive emotions do not preclude some beneficial outcomes of negative emotion, which may include ability to make critical evaluations, enhanced deliberate decision-making, or reduced workplace interruptions by co-workers (Staw et al, 1994).

² This includes Livestock permits, warrant entry, burn permits and the like.

³ See http://www.apointl.com/institute/RPL_program.htm for pricing structure, scholarship opportunities and eligibility requirements.