

James
Crosbie
Myers
Gray
Blues
Beard
Henson
Feigel
Lawless
Martin

INTER-GOVERNMENTAL COMMITTEE

January 12, 2010
1:00 P.M.

A G E N D A

1. E 911 Call Center Management- Lawless (1-34)
2. Update on Committee Items (35-36)

"Inter-Governmental Committee, to which should be referred matters relating to wages and classification, personnel, government organization, employee relations, government buildings and property maintenance."

Council Rules & Procedures, Section 2.102(2)



**Lexington-Fayette UCG
Department of Public Safety
Division of Enhanced 9-1-1**

Monthly "911 Call" Ring Time Ranges

Primary PSAP

2500139	911 Calls	0 to 10 sec	%	11 to 20 sec	%	21 to 30 sec	%	31 to 40 sec	%	41 to 50 sec	%	51 + (Max)	%
Jan	No	Data		Hardware		Failure		01/01/2009		Through		03/02/2009	
Feb	No	Data		Hardware		Failure		01/01/2009		Through		03/02/2009	
Mar	14,195	13,880	97.8%	297	2.1%	9	0.1%	4	0.0%	3	0.0%	2	0.0%
Apr	15,398	15,051	97.7%	335	2.2%	6	0.0%	1	0.0%	5	0.0%	0	0.0%
May	17,345	16,886	97.4%	441	2.5%	11	0.1%	1	0.0%	3	0.0%	3	0.0%
Jun	15,730	15,306	97.3%	408	2.6%	9	0.1%	4	0.0%	0	0.0%	3	0.0%
Jul	16,472	16,106	97.8%	351	2.1%	5	0.0%	3	0.0%	7	0.0%	0	0.0%
Aug	18,182	17,684	97.3%	481	2.6%	13	0.1%	2	0.0%	1	0.0%	1	0.0%
Sep	17,014	16,620	97.7%	381	2.2%	4	0.0%	2	0.0%	4	0.0%	3	0.0%
Oct	19,657	19,189	97.6%	450	2.3%	8	0.0%	3	0.0%	6	0.0%	1	0.0%
Nov	16,612	16,270	97.9%	325	2.0%	9	0.1%	8	0.0%	0	0.0%	0	0.0%
Dec	16,122	15,755	97.7%	352	2.2%	7	0.0%	8	0.0%	0	0.0%	0	0.0%

Secondary PSAP

2500140	911 Calls	0 to 10 sec	%	11 to 20 sec	%	21 to 30 sec	%	31 to 40 sec	%	41 to 50 sec	%	51 + (Max)	%
Jan	2,497	2,463	98.6%	33	1.3%	0	0.0%	1	0.0%	0	0.0%	0	0.0%
Feb	2,226	2,198	98.7%	28	1.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Mar	2,226	2,196	98.7%	27	1.2%	1	0.0%	1	0.0%	0	0.0%	1	0.0%
Apr	2,128	2,114	99.3%	12	0.6%	2	0.1%	0	0.0%	0	0.0%	0	0.0%
May	2,687	2,656	98.8%	22	0.8%	2	0.1%	2	0.1%	0	0.0%	5	0.2%
Jun	2,132	2,116	99.2%	14	0.7%	1	0.0%	1	0.0%	0	0.0%	0	0.0%
Jul	2,282	2,256	98.9%	23	1.0%	3	0.1%	0	0.0%	0	0.0%	0	0.0%
Aug	2,225	2,193	98.6%	29	1.3%	2	0.1%	1	0.0%	0	0.0%	0	0.0%
Sep	2,223	2,206	99.2%	17	0.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Oct	2,510	2,488	99.1%	22	0.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Nov	2,089	2,055	98.4%	33	1.6%	1	0.0%	0	0.0%	0	0.0%	0	0.0%
Dec	2,177	2,155	99.0%	22	1.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Division of E911

Leave Hour Usage & Vacation Leave Extension

	Holiday Hours Used 2009	Vacation Hours Used 2009	Total Holiday & Vacation Used 2009 (hrs)	Total Leave Used In 2009 (weeks)	Vacation Balance 2009 Year-End	Vacation Hrs Rolled Over to 3/31/10	Vac.2009 Cut-Off + 2010 Accruals (roll-over +168 per yr)	Holiday Balance 2009 Carry Over	Hol. 2009 Cut-Off + 2010 Accruals (10 hrs/month + 2 swing hol.)	Total Hours Available In 2010 (Vac & Hol)	Total Vac & Hol Hrs To Use By 12/31/10	Total Leave to be Used 2010 (weeks)
1	164.0	113.0	277.0	6.9	311.0	143.0	479.0	80.0	210.0	689.0	441.0	11.0
2	156.6	116.0	272.6	6.8	268.0	100.0	436.0	77.4	207.4	643.4	395.4	9.9
3*	70.0	124.0	194.0	4.9	259.5	91.5	427.5	80.0	210.0	637.5	389.5	9.7
4	178.4	184.0	362.4	9.1	256.0	88.0	424.0	73.6	203.6	627.6	379.6	9.5
5	168.5	126.1	294.6	7.4	249.9	81.9	417.9	77.5	207.5	625.4	377.4	9.4
6	133.1	130.0	263.1	6.6	225.0	57.0	393.0	78.9	98.9	491.9	243.9	6.1
7	120.0	100.0	220.0	5.5	220.0	52.0	388.0	58.0	78.0	466.0	218.0	5.5
8	155.0	116.0	271.0	6.8	217.0	49.0	385.0	69.5	89.5	474.5	226.5	5.7
9*	60.5	100.8	161.3	4.0	201.4	33.4	337.4	80.0	100.0	437.4	189.4	4.7
10	150.0	165.0	315.0	7.9	197.0	29.0	365.0	59.0	79.0	444.0	196.0	4.9
11*	72.0	144.0	216.0	5.4	178.0	10.0	346.0	65.4	169.4	515.4	267.4	6.7

Notes:

All but 1 employee listed earns 10 hrs Holiday leave for each LFUCG holiday, plus 2 swing holidays, due to policy changes eff. July 2009.

5 of 11 employees listed are Exempt, thus they do not have the option of being paid out holiday hours when holiday is worked.

10 of the employees listed accrues 14 hours Vacation leave per month, one will rec'v 10hrs/month thru Aug then 14hrs/month Sept-Dec.

DISPATCH Magazine On-Line

Staffing and Shifts

There is no more common question among comm center administrators--and even dispatchers--than those about staffing. How many dispatchers should we have, how many people should be taking phone calls? How can I spread out 12 dispatchers on a 10-hour schedule? On and on.... [Recommend](#)

There is no standard formula, mathematical or otherwise, to that question. It can only be determined with a time and task study of your center, and an evaluation of your agency's performance goals. We've tried to answer some of the questions in this section. However, do **not** look for the answer to the one burning question that everyone wants to know: How many dispatchers should my comm center have? You have to perform some survey work before that question can be answered.

We've attacked the most important areas: **shift staffing** (How many people do I need to staff X dispatchers on each shift?), **shift configurations** (What days and hours should the staff work?), and **calltaker staffing** (How many calltakers do I need to answer X number of calls?). These three questions **can** be answered with formulas. Besides lots of our own resources, further down the page we list Web sites that offer assistance, along with a list of companies that market software for shift scheduling.

By the way, the nation's public safety comm centers continue to suffer through a staffing shortage. There have been fewer and fewer applicants, and many veteran dispatchers are retiring--or just leaving. Check these resources first for perspectives on the staffing crisis:

- We've posted our [recommendations](#) for solving the on-going staffing crisis faced by America's public safety comm centers.
- We've collected experiences and feedback from dispatchers their schedules and staffing.
- **Hot!** In August 2005 APCO's "Project RETAINS" issued its final [reports](#) and documentation for helping to determine proper staffing--it's a **must read**.

Shift Staffing

Ads by Google

Public Safety Scheduling
Easily manage 24x7 schedules and complex timekeeping rules
[www.IntelliTime.com](#)

Fast, Easy Labor Schedules
Automate your Employee Schedules Free Trial, No Software to Install!!
[www.TimeForge.com](#)

Nurse Scheduling Software
Staffing Angel Software a scheduling and staffing application
[www.staffingangel.com](#)

Call Center Price Quotes
Get 5 Free Quotes From Leading Call Centers. Vendors Compete - You Save
[www.VendorSeek.com](#)

EMS Employee Scheduling
Optimize your employee scheduling. Improve your efficiency. Free Demo.
[Aladtec.com/EMS_MANAGER-I](#)

The most common question among comm center administrators is, "How many dispatchers do I need?" This question focuses the tasks, number of consoles and other issues, and cannot be condensed to a single math formula. One would have to perform a time study of the work now being performed, determine the workload for each hour of the day, and consider the agency's performance goals (answer all calls within 10 seconds, etc.) in order to determine how many dispatchers to staff on each shift.

In many cases, the number of personnel can be figured pretty simply from the required tasks of an ordinary time period, for an ordinary day:

- you have two radio channels that need constant and individual attention (2 persons)
- you have a warrant/teletype position that handles field requests via radio, enters stolen vehicles, etc. (1 person)
- you have 6 in-coming 911 lines and 8 administrative lines, have an automated attendant that filters out most administrative calls, and you want to be able to handle 3 simultaneously 911 calls (3 persons)
- you have an alternate radio channel that needs constant monitoring for officers requesting tows, callbacks, etc. (1 person)

This means you'll need **seven** persons on-duty to physically handle tasks. With this figure, you can then factor in several variables:

- some periods of an ordinary day are busier than others, and you may need additional telephone support
- some days of the week are busier than others, and you may need additional telephone support
- during busy periods, you may need additional radio support.
- to account for breaks, you may need an additional full-time or part-time person during a 24-hour period.
- to account for 24-hour operation, you'll need more staff
- to account for sick leave, vacation and other leave, you'll need more staff

All of this will lead you to learn that it takes 25+ persons to fill seven seats every hour of every day.

You can use much more complicated time-study techniques to determine how many different and simultaneous tasks a dispatcher can perform, and how busy they typically are. However, for most comm centers, the basic staffing numbers are pretty obvious. It's the variable workload and leave factors that are often tough to determine.

Relief Factor

Once you determine how many dispatchers should be on each shift, one **can** determine how many staff is required

to fill those necessary positions. The formula is based on the simple fact that you need one full-time person to fill each position, plus some **fill-in** position (another shift, part-time worker, etc.) to staff that full-time person's **days-off, vacation and other leave**. This **Relief Factor** has been standardized in the private sector as .7, thereby making the number of persons to fill one full-time position as 1.7. [how to figure Relief Factor]

Here is the formula for determining total staffing:

P= Positions you have determined need to filled on all shifts (4 on days, 5 on evenings, 3 on nights)

V= Vacancy Factor (takes into account the weekly days-off, vacation, sick leave, etc.)

$P \times V$ = total number of staff

In the above example, you have a total required staff of 12, so...

$$(4+5+3) \times 1.7 = 20.4$$

In this case, you would hire 21 persons, and then move on to the next question, "How do I assign these 21 persons to fill the required staffing?" This can be the most complex problem to solve.

By the way, we've also seen the factor 5.1 used to represent the number of persons it takes to staff **one** position 24 hours a day, 7 days a week (spread out over 3 shifts). If your staffing is **identical** on each shift, this figure would result in the **same** total as using the 1.7 vacancy factor used above. For example:

3 persons required at all times of the day

$$3 \times 5.1 = 15.3 \text{ total staff}$$

You would then hire 15 (or 16) persons and assign them to cover the three shifts. This 5.1 factor would not be useful when **variable** shift staffing is needed (such as covering busy periods).

Shift Configurations

There are many ways to configure shifts at a comman center. However, all the possibilities revolve around several standard issues:

- each dispatcher must work only 40 hours in any given calendar week to avoid paying overtime under the Fair Labor Standards Act (FLSA)
- each dispatcher must have days-off according to any applicable laws and union agreements
- there must be sufficient staffing on each day to perform essential tasks, taking into account variations in activity by hour of day and day of the week
- the staffing must take into account the usual absence rate, including sick leave, vacation and other leave
- to some extent, you must take into account the desires and wishes of the employees on the way shifts and days-off are configured

From these considerations, there are two primary configurations issues for an administrator:

- the overall policy on days-off and shifts (8-10-12 hours per shift, and 2-3-4 or varying days-off)
- within each shift how is he 24-hour day is staffed (three non-overlapping, 5 overlapping, etc.).

Both of these issues are affected by the number of hours that a dispatcher works per shift: 8, 10, 12 or 24 hours.

Right now, the 10-hour shift is very popular among dispatchers, because it allows them three days-off. The **12-hour** shift is uncommon but growing in popularity because it also allows more consecutive days off for employees. The **24-hour** shift is more common among fire dispatching comm centers, but requires some type of sleep-rotation schedule and facilities. That leaves the **8-hour** shift as the most common shift length. We have graphed several of the more common shift configuration possibilities below. We know that there are many more. The examples we use below are only **representative**. That is, they show only enough dispatchers to graphically display how the days-off and shifts are assigned. It does not take into consideration your authorized positions, required dispatchers per shift, etc. You would have to apply the days-off and staffing principle to your particular operation.

Shift Length Variations

- 8 hours

I've collected lots of different shift configuration from Web forums and e-mail, including some very complicated 12, 10 and 8-hour examples. If you have a unique or valuable configuration that I haven't included, e-mail it to me for posting.

- 10 hours
- 12 hours
- 24 hours
- 12-8-4 variable hours

Days Off, Shift Assignments

- same days-off, same shift
- same days-off, rotating shift each week

Shift Configurations

- staggered two days-off

Call-Taker Staffing

One of the most common questions among public safety comm center administrators is, "How do I calculate how many dispatchers I should have?" As we mentioned, this is difficult for several reasons, not the least of which that there is no standard staffing level for comm centers, and no mathematical method of taking into account all the variables involved and coming up with a reasonable figure. However, we have assembled the following resources to give you a start on your calculations.

- Hot! Download the article, written by Bill Weaver, 911 product manager for Nortel Networks, and published in the Winter 1999 issue of **NENA News**, that gives **modern formulas** and methods for calculating the optimum staffing for comm centers. It's one of the few methods we've seen that takes into account both call-taking and radio dispatching, and uses common sense and logic to come up with a result that you can use to justify your current staffing, or propose an increase. [posted in Acrobat .pdf format, 25k download]
- There are Web sites that allow you to make on-line calculations on the necessary number of dispatchers, phone lines, etc. The computations are based on the **Erlang queuing theory** used by telephone companies, but applies to many types of telecommunication operations. Check the Westbay Engineers and Cyntergy Corp. sites.
- The September 2000 issue of **Public Safety Communications** has an article by Editor Jennifer Hagstrom that provides a formula for determining the number of positions necessary to provide 24x7x365 staffing. It does not calculate the number of persons needed to perform a certain number of tasks, but rather provides

staffing requirements to cover vacations, breaks, sick leave, etc. The original formula printed in the magazine contained 16 variables and several separate operations. We've boiled all of it down to a more manageable calculation.

- NENA has convened a Human Resources Committee to examine the issue of staffing, and has received a grant to develop a "formula" for determining optimum staffing for public safety comm centers (although it may not be a traditional mathematical formula). The work could be completed by late 2004.
- In 1976 the Department of Justice commissioned the Stanford Research Institute (SRI) to study the operation of 911 comm centers, and as part of that study SRI developed a table of optimum staffing for the call-taking operation. We have been able to locate only one paper copy of the original study--see our Q&A page for contact information.
- In 1985 authors David J. Brenner and Marilyn A. Cadoff wrote a paper for the U.S. Department of Commerce titled "Guide to Computer-Aided Dispatch Systems." It described the then-new method of programming a computer to track units and incidents. In Appendix B of that document, they set out, "Determination of the Number of Complaint Operator and Dispatch Terminals Required for a CAD System." The document was converted to Acrobat format and originally posted on the APCO Web site. We have re-posted the entire document (1.8 Mb!) here, along with just Appendix B, both in Acrobat (pdf) format.
- The Westbay Engineers site also has a White Paper on the design and staffing of a call center (public safety or not) and offers fee-based resources (software for Windows 98/NT) for determining the optimum staffing.
- In 1997 Frederick Stanley prepared a staffing presentation for APCO--it's posted on their Web site in Acrobat (pdf) format. [[Acrobat/pdf index of their APCO documents](#)]
- The Ansapoint Web site has a White Paper that discusses a method of calculating the number of call agents in a **private** call operation.
- The British-based Mitran Corp. markets a Windows-based software product that provides all sorts of call center calculations, including staffing.
- Corona Solutions offers a demo download of their sophisticated shift calculation software, Staff Wizard. Using a mathematical model, Staff Wizard analyzes your workload data from CAD or manual entry, and displays graphs and statistics to effectively staff your resources. ^{updated}
- The state of California's 911 Program reimburses agencies for the cost of equipment to receive and process 911 calls. They've established a method and formula to figure out how many consoles they'll pay for. It's not quite like figuring out how many dispatchers you need, but it's excellent guidance.
- You should obtain a copy of Standard 1221 from the National Fire Protection Association (NFPA), which sets out minimum staffing and telephone answer times for those comm centers performing fire dispatch services. The standard is available for a fee on-line both in a printed and Acrobat (pdf) version for \$24.95 (slightly less for members of the NFPA, 2007 edition in draft form [[pdf](#)]^{now}).
- Presentation by Nate McClure at 2009 APCO conference on determining your optimum staffing level (pdf)

NEW!

The Chart

We've downloaded a chart created from Erlang theory calculations, reassembled it into an Acrobat (pdf) document, and posted it here to help you determine how many dispatchers you'll need to answer telephone calls--it doesn't take into account any other activities, such as radio dispatching, outbound calls, paperwork, CAD typing, etc.--**only answering telephones**. Nevertheless, it's useful to obtain a ballpark staffing figure, especially if you have a dedicated call-taking operation.

The recommendations assume several things:

- The handling of incoming 911 calls can be appropriately predicted by using the Poisson queuing theory.
- The table recommends optimum staffing for the **busiest** hour that you experience in a day, or a given period. If your call-taking operations experiences up and down call volume, the recommendation applies only to the busiest period. If you staff according to the table, you might actually be over staffed during low volume periods (0100-0600, for example).
- The standard of performance is that 90 percent of calls are answered within 10 seconds. If **your** performance standard is different, then the recommendations would not apply exactly.
- The "length of call" figure used in the table must take into account any associated work that the call-taker must perform to complete the task. For example, it might take just 10-15 seconds to handle the telephone portion of the incident, but another 35-40 seconds to complete the CAD entry.
- You would typically take the figure for the required number of dispatchers and multiply it by 5.1 to determine the **total** number of personnel to provide the required staff for **24x7** (see our first section above). This assumes that your staffing is the same on all shifts--you can add or subtract positions after you multiply, in order to arrive at a more accurate figure.

How to Use This Table

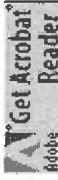
Download the chart, print it out and follow the instructions printed on it. Here they are:

- Determine the average number of telephone calls you handle in one hour, typically your busiest hour.
- Determine the average duration of an in-coming telephone call in seconds.
- Find the call duration figure, or the next highest figure, in the top row of the table--call durations run from 30 seconds to 120 seconds, left to right.
- Go down the call duration column and locate the figure for the average number of telephone calls you

receive in a peak hour, or the next highest figure.

- Go left across that row to the "Call-Taker Needed" column to determine the number of call-takers you should have on-duty for your peak volume hour.

The Chart

You can obtain a free copy of the Adobe Acrobat reader from the Adobe Web site. 

Alan Burton adds:

All (I think "all") of the formulas for staffing predictions are predicated on establishing the existing average length of call and using that as the basis for further calculations. I believe this assumption is incorrect, since there is a failure to determine if the average length of call is appropriate or justified.

An agency for which I am working now has an average length of calls of 4-1/2 minutes and has elaborately built staffing around that statistic. There is no justification for that length of call, other than that is what it takes. Since the length of call averages can be translated into budget costs, every second trimmed off the average can save the agency money.

My view would be to take the busy hour, transcribe all of the calls, and determine from those transcriptions if the average handling time was appropriate. Generally, the calls can be objectively evaluated and average handling times can be adjusted accordingly.

Some agencies have concluded that the average handling time is less important than the agency's ability to provide the highest level of customer service. If the call can be concluded in 60 seconds or 60 minutes is less important than the impression left with the caller that the agency performed an exemplary service. Of course, such service comes at a cost.

Some agencies have found that a two-tier answering service can work well to properly manage calls, maintaining a good customer service while controlling costs. Such an arrangement specifies that the call taker must complete the call within (for example) two minutes, and if it cannot be, must be transferred to the second tier. The second tier may consist of a small unit of personnel more skilled at call handling, but at a classification level below that of supervisor. Call handling averages can then be categorized and evaluated, with accurate statistical data separating easy to handle calls from those few that require additional time.

PSAT 911 Emergency Backup
Eliminate PSAP vulnerability with 911 Dispatch over Satellite VSAT
www.SDNGlobal.com

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Shift/Staffing Resources

We've collected various Web pages over the years that provide some assistance in shiftwork, staffing and scheduling. Your **first stop** for resources should be:

- An APCO article by Jennifer Hagstrom that boils down staffing calculations to 16 variables.
- A NENA-commissioned [survey and spreadsheet](#) developed by consultants L. Robert Kimball Inc.

The following Web sites have general shift and staffing information:

- The [Circadian Technologies, Inc. Web site](#) [News Briefs] [1999 shiftwork survey, Acrobat .pdf format, 342k] [seminars] [publications]
- This Web site allows you to create and print a shift calendar (although it's specifically intended for fire and EMS workers)
- Manager's Guide to Alternative Work Schedules by Weldon L. Booth , from IPTM Bookstore
- Results of a 1999 survey of shiftworkers by Circadian Information
- PBS television show on "Night Shift," resources on night shift work [order the video, \$99]
- National Sleep Foundation, strategies for shift workers
- Incoming.com Web site for commercial call centers -- publications, seminars on staffing levels, compensation and more
- Dispatch supervisor Linda Olmstead describes one agencies plan to handle holiday schedules.
- Industrial Call Center Weekly published an on-line series of four articles on how to determine staffing for non-public safety centers (telemarketing, etc.), but many of the same principles apply. Surf the [final article](#), and note the links to the previous three articles.
- The province of Ontario (Canada) commissioned the IBI Group to study the EMS comm centre in Hamilton. Their [120-page report](#) contains useful information on staffing and shiftwork. [Acrobat, pdf format, 565k]
- The Ontario (Canada) government commissioned a consultant to study [Hamilton's EMS comm center](#), and

came back with recommendations on staffing, etc.

- The [Sleepnet.com Web site](#) is devoted to sleep health, including how to accomodate shiftwork.
- The [Work Options Web site](#) has information on the pros and cons of compressed work schedules, and how to justify the change, along with the [Avoid The Rush Web site](#).
- The [University of South Australia's Sleep Research Centre](#) offers some thoughts on shiftwork and configurations.
- [Hatrak Associates](#) has several software resources for scheduling and staffing, plus some on-line information.
- The [Work in America Institute](#) produced a report on "New Scheduling Options for Unionized Employees," which explores the pros and cons of various options, and has lots of good backround on the issues. [[Acrobat, pdf, 2.9 Mbl](#)]
- [Glen McBride](#) publishes a [blog](#) titled "24/7 Life," with lots of links and information on the issues of working shifts.
- [Bruce Oliver](#) has a [Web site](#) that covers shift scheduling, with lots of information for getting you started, but also provides a fee-based service for creating customized schedules for your comm center.
- 12-hour shifts are very popular, and here's a [medical-type analysis \(pdf\)](#) of 12 vs. 8 made in 1998, an [analysis \(pdf\)](#) of rest days when using 12-hour shifts, and an [analysis \(pdf\)](#) of how 12-hour shifts affect performance in younger/older persons.
- [Kitfcom](#) (Wash.) uses 12-our shifts and has posted a spreadsheet of their schedule.

Shift & Scheduling Software

- [Schedule Me!](#) has two on-line scheduling programs--one is great for calculating **days-off** based on the number of persons required to be on-duty during each shift of a day. There are downloadable Windows and Mac versions of the program that are free. They also consult and offer computer scheduling software.
- The Association of Public-Safety Communications Officials (APCO) commissioned a Task Force on staffing, and they gave their [preliminary report](#) at the association's 2000 annual conference in Boston.
- [Madrigal Software](#) offers software to manage projects and people.
- [Cenadex](#) offers scheduling software for both law enforcement and firefighting agencies, with the capability to page personnel for shift sign-ups.
- [Jivasoft](#) markets shift scheduling software for law enforcement agencies and comm centers.
- [Shiftwork Solutions LLC](#), offices in the U.S. and Australia, consulting services for private sector as well as law enforcement agencies and public safety comm centers.
- [Shift Schedules](#) offers Excel spreadsheets (Mac and PC) that assist in scheduling personnel, and offers free trial downloads. Cost varies by size of the spreadsheet necessary to handle the agency, and ranges from \$49 to \$699 for site licenses.

- Intellicate Ltd. - Staff scheduling and workforce management software for creating and planning automated staff schedules. Maintains records of staff working hours and costs, automate staff schedules, built-in shift pattern wizard, allocate staff breaks, assignments and tasks, publish dynamic web schedules, monitor and analyze staff and prepare comprehensive management reports. Free fully functional 30-day trial available. They also offer free shift pattern templates on their web site, including some specifically for 911 dispatch teams. updated
- Asgard Systems offers a software program to automate the employee scheduling process.
- In early 2002 Professional Pride assumed marketing of the former Jivasoft shift scheduling software as 911 Schedule Wiz which is based on Microsoft's Access database software.
- The Incoming Calls Management Institute markets an Excel-based, spreadsheet scheduling solution.
- espSoftware markets a Windows-based personnel scheduling program, and a free demo download for you to try out before you buy.
- EDP Software offers an automated employee scheduling software, Schedule Pro that is very comprehensive and easy-to-use. This powerful system saves time, money and frustration.
- InTime Solutions offers software specifically tailored for comm center (as well as law enforcement agencies and fire departments) that helps schedule 24-hour operations. They offer a free download of the software for evaluation.
- ScheduleSoft Corp. markets software that helps take the complexity out of arranging shifts and days off for any configuration. In particular, check their pre-entered templates for use with their software, that also includes loads of informative text you can use even without the ScheduleSoft program. The company has also created a Web site for on-line scheduling activities, including schedule creation, shift selection, etc.
- Nematek has posted software that was originally written for the Fort St. John detachment of the Canadian RCMP.
- Auto Schedule 5.0 - affordable employee scheduling software that schedules employees automatically on a shift by shift basis. It also tracks requests-off and payroll.
- Kappix Employee Scheduling Software - rule-based scheduling, unlimited shifts and personnel, templates, reports.
- Atlas Business Solutions - employee scheduling software: Visual Staff Scheduler PRO (VSS PRO). With VSS PRO you can ensure shift coverage, reduce overtime, track time-off and print, e-mail or publish custom schedules and reports. Company offers 90-day unconditional money-back guarantee.
- Aladtec Inc. - offers EMS and fire department scheduling solutions, including smartphone support, messaging, calendars and employee database.
- Italy-based frLab offers software for scheduling and staffing. NEW!

Shift Configuration Samples

From the material we've collected over the past couple of years, we came across an incredibly complicated schedule that's actually worked by dispatchers. We've mapped it out with color coding and present it in Acrobat (.pdf) format. We also have posted a collection of circa 1976 schedules that were compiled by APCO.

Also check the example of a 10-hour shift schedule that features rotating days-off, from the Cincinnati Police Department comm center.

Shift Selection

Most agencies have a method or scheme for allowing dispatchers to select the shifts they want: the time of day to work, and the days-off to have. In most cases, these schemes were originally devised by the dispatchers, and then formalized by a union agreement. The agency almost always agrees to these schemes with the condition that the police or fire chief, or manager of the center can re-assign personnel based upon the needs of the agency (such as going to 12-hour shifts for a large emergency or staffing shortage, shifting trainers to another shift, not allowing an all-rookie night shift, etc.).

In **all** cases, the procedures should be typed up, written out, posted, signed, acknowledged, filed, etc., with all personnel. Everyone **must** know how the procedure works, and the implications of their selections, decisions and choices. There will **always** be disputes, either through misunderstandings or interpretation of the procedures. Just like contract law, anticipate problems and cover them in the procedures.

In most cases, shift selection is done in seniority order. That is, the person with the most seniority is allowed to select their choice of shift first, followed by the next person. Persons at the end of the list have very little choice of shifts, and the last person--well, they're stuck. Shift selection can occur annually, or at some more-frequent interval.

Other agencies **rotate** dispatchers among the 3-5 available shift hours, and allow the dispatchers to select their days-off by seniority. Typically, mandatory rotations more frequently than voluntary ones, on the theory that the agency is "spreading out the misery" of working evenings, nights, etc. Under this situation, a dispatcher can anticipate what hours they'll be working, although they still can count on certain days-off until the selection process is over (or they have very high seniority).

By the way, **vacation** selections are frequently performed the same way: by seniority, at least one year in advance. That is, dispatchers would select one year's worth of vacation in 2002 during November 2001. Vacation can either be selected all at once (whatever vacation time the dispatcher has accrued), or in "rounds," during which they can pick some maximum amount (80 hours each round, for example). The rounds continue until no dispatcher has any

more vacation to select. The "all at once" approach favors the most senior personnel (they get best pick), while the "rounds" approach gives the lower seniority personnel at least some chance of obtaining a decent summer week off.

The agency may also apply other limitations to the vacation selection, including that you can only pick contiguous weeks (no one-week-here, 3-weeks-there), no more than three (or whatever) dispatchers off at once, no changes after selecting, a canceled week is offered to dispatchers with less seniority (on down the list), etc. Again, much of this procedure could be regulated by **union contract**.



DISPATCH **Magazine On-Line**

Comprehensive Guide to Comm Center Staffing Shortages, Origins & Solutions

The nation's public safety communications centers have been suffering under a staffing shortage since 1999, when the nation's unemployment rate dropped to record low levels, and the technology revolution began offering job benefits and pay that government agencies could not match. Even with the alleged dot.com crash of mid-2001, there are still fewer applicants for dispatching jobs than in the early 1990s. With no source of new trainees, and continuing retirements or other departures from the profession, many comm centers are operating at 60% of their authorized strength--or less.

There has been much hand-wringing, complaining and brainstorming by the nation's comm center administrators trying to solve the problem. In the meantime, the remaining dispatchers are forced to work 60-hour weeks (or more), to work while they're sick, to neglect their friends and family, and to suffer from the stress of handling critical incidents every day.

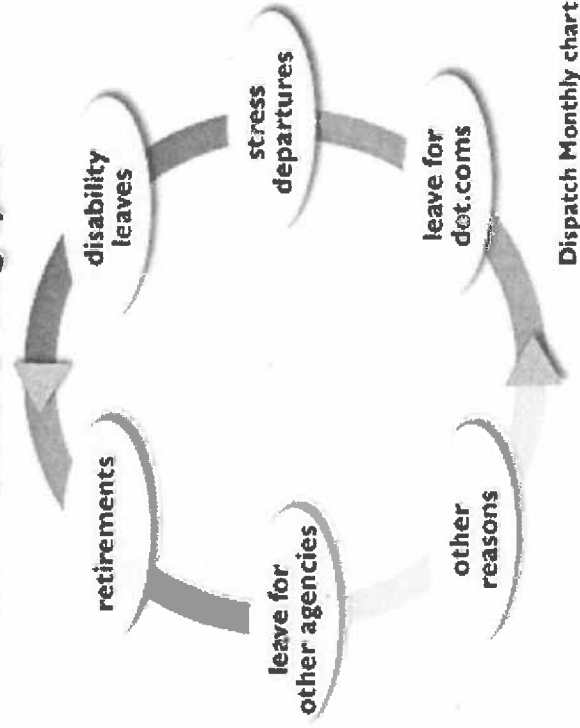
Note! The Association of Public-Safety Communications Officials (APCO) convened a task force to study the issue in 1999, and released a final report that includes recommendations and best practices. In August 2001, APCO formed a formal committee on the subject (Project 40, or Project RETAINS), headed by Julie Righter, director of the Lincoln (Neb.) 911 Center. In mid-2005 they issued a "toolkit" for helping to determine proper staffing levels within a comm center. Surf the Project's [Web page](#) for complete information, forms, reports, etc.

There is no single solution to the staffing shortage. In fact, there may not be **any** solution to the crisis. There are, however, several steps that a comm center manager can take to diligently work on the problem--and that's what it really takes, continuing scrutiny of the problem and work to solve it.

However, this Guide examines how the staffing shortage began and suggests several steps that managers can take to address the problem. Good luck!

Gary Allen
Editor, DISPATCH Monthly Magazine
updated 2/1/07

Comm Center Staffing Spiral



This diagram shows how comm center staffing begins with normal departures, and then starts to become critical as departures increase due to the shortage itself. Once the staffing situation becomes critical (the red area), the cycle begins again, but this time motivated by the crisis, not the normal routine. One big hurdle to solving the staffing crisis is to somehow break this cycle.

A typical comm center experiences "normal" departures each year: retirements, those moving on to school, those making a profession change, those with medical problems, those transferring to another department within your jurisdiction (even dispatchers being promoted to officer or deputy!). The normal challenge for a comm center manager is to match these departures with hiring new trainees, and turn them into veteran dispatchers (green zone).

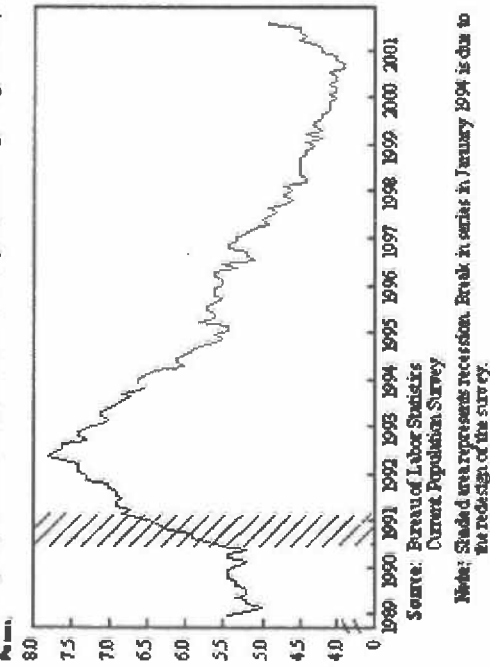
However, once the supply of applicants begins to dwindle, the staffing problems begin. The "normal" departures continue, draining personnel from the center. The remaining employees are left to handle the job tasks, putting them under additional stress (yellow zone). Those remaining employees sleep less, eat less nutritiously, and work harder to keep up. They make sacrifices for themselves, their family and friends (pink zone). All these conditions begin to take a toll, and some dispatchers begin to take more sick leave, go off on disability leave, or simply quit out of frustration (red zone).

The cycle then begins again, but this time it's motivated by the staffing crisis conditions, not the normal reasons for leaving. Dispatchers see retirement as an attractive option, whereas they were going to work another five years to gain more benefits. Dispatchers working "wounded" decide they'd rather go off on disability, and perhaps leave with some type of disability settlement with the agency. Others with more minor ailments decide to take more sick leave, or stop working overtime. And, of course, dispatchers leave when they see attractive offers from other comm centers or private sector jobs.

And it just keeps going around and around, until... "Will the last dispatcher please turn out the lights?"

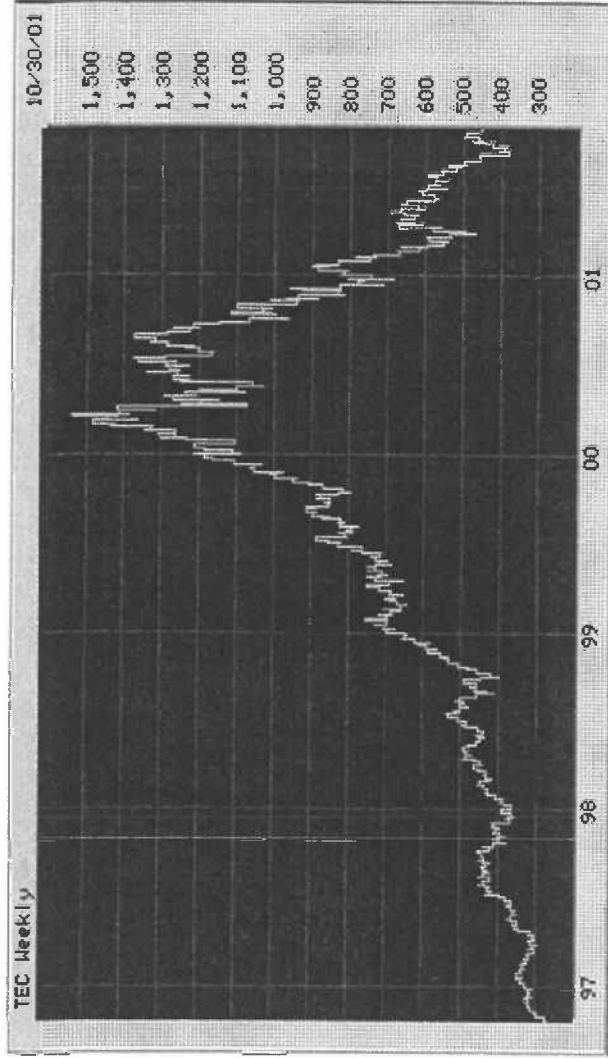
Where did this crisis begin? From the chart below, you can see that the crisis was some seven years in the making--the nation's unemployment rate began a steady decline in 1993, bottoming out below four percent in late 2000.

Unemployment rate, 1989-2001 (seasonally adjusted)



As more Americans went back to work in the 1990s, public safety comm centers were undergoing a transformation: from clerical workers handling phone calls and incidents with manual methods, to tech no-savvy professionals managing three, four or five computer systems to track and manage public safety field forces. This change was so incremental, and so "makes sense" that few in the profession saw the need to revise job descriptions, change compensation levels or take other actions to reflect the increased emphasis on technology.

At the same time, America's economy was changing--steel and iron production was out, information technology was in. Computer, Internet and other technology companies were recruiting workers that were educated, knowledgeable about computers, required little supervision, and who could think on their feet. Those criteria, unfortunately, were an exact match to what comm centers needed, too. But dot.com companies had one big advantage--they could offer prospective employees an enormous array of benefits: free cafeteria and snack bar, indoor running track, casual and pizza Fridays, valet dry cleaning and film processing, stock options, and on and on. All this was on top of excellent working conditions (ergonomic workstations, latest equipment, well-designed lighting, etc.) and a supportive management style.



5-year stock performance of selected technology companies. Source: BigCharts.com

Given the two options, America's tech no-types opted for technology companies, and left public safety comm centers to fend for themselves. But, as government agencies, comm centers had no way to compete. With only the public's tax money to spend, they couldn't easily raise wages (and could never match the private sector's pay), they couldn't offer equal benefits, and they certainly couldn't offer some of the outlandish perks that dot.cams offered. Comm Center applicant tests turned into depressing events attended by fewer and fewer persons, and fewer of those passed and went on to become employees.

Through October 2001 the situation hasn't changed. Despite the above two graphs, the increase in unemployment and the decline of the technology and Internet companies hasn't really changed the application situation--there continue to be few persons who want to make public safety dispatching a profession. In summary:

- a decline in unemployment dried up the applicant pool
- the dispatcher job becomes increasingly technology oriented
- the rise of technology companies provides competition for tech no-candidates

- comm centers cannot compete with technology company benefits
- the situation hasn't changed now that unemployment-technology is reversing

So armed with some facts, comm center managers must push on from here....how do you break the staffing cycle, how do you attract new applicants, how do you fill those chairs in order to continue the high quality of service necessary to serve the public?

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A Set of Unified Solutions

As I said in the introduction, there is no **single** solution to the current staffing crisis. Instead, one must implement a set of solutions--and keep at it. The problem is not something that can be solved either immediately, or one time. You'll have to break out the ordinary, every-day working mentality, and come up with some new ideas based on a careful re-examination of your workplace and working conditions. Here's my suggestions:

1 Keep the employees you have. You must begin to break the cycle of departures (chart above) any way that you can. In most cases, this involves removing the sources of stress the dispatchers are encountering: longer hours, poor work conditions (heating, air conditioning, lighting, ergonomics, no break room, etc.), unnecessary paperwork or procedures, poor lines of authority, etc. If you don't already (and you should be), involve the dispatchers in some degree of the comm center's management. No comm center can be run as a democracy, but it's a fact that a significant amount of a worker's stress comes from being unable to control their work environment. If you can involve the dispatchers in some of the management decisions--or at least invite their suggestions and feedback--you'll significant decrease their frustrations.

Reduce the stress at every opportunity!

You should work very hard on the issue of overtime, mandatory overtime, canceled vacations and refusal of time-off

requests. In general, America's workers put more emphasis on personal time these days. Dispatchers caught in a staffing crisis are no exception, and because of the associated stress, need their time off to recharge and wind down. If you require overtime, the policies and procedures must be fair and apply to all. You should obtain feedback from the supervisory staff on how the procedures are working, if they are effective at providing 24-hour staffing, and the effects the mandatory overtime is having on the dispatchers.

There are many other areas you should be examining for improvements--basic pay rates, shift differentials, overtime pay, other benefits like paid meals, uniform allowances, parking, breaks, etc. Yes, there are limits to what you can do. But consider **everything**, rule nothing out, and push hard against the resistance of higher-ups to change. A lot is at stake.

You should also consider alternative forms of staffing the center, including different hours (4x10, 12x3, etc.) and using officers, deputies or firefighters. These alternatives are many times regulated by contracts or unions, so you'll have to investigate fully. You may encounter all sorts of objections to bringing sworn personnel into the comm center. However, it can be done. And given the crisis, the effort is justified.

If you're successful, you can at the most postpone (or improve upon) the staffing crisis. You can't solve it simply by keeping your current employees. But this is a crucial first step.

2 Make the benefits competitive. You can't compete with the dot.com companies, for sure. However, you **can** examine all aspects of the job description and work on adding or improving benefits, especially if they don't involve money. Look within your jurisdiction for benefits already allowed other departments or units, and which the dispatchers don't have. For example, is there child care available for other employees? Is there housing assistance, transit subsidies, improved retirement, deferred compensation, life insurance, etc. that could be applied to the dispatchers. In some cases, this might require renegotiating a contract. In other cases, the change in benefits can be mutually agreed by both parties, and then simply implemented.

Study the job description materials, and imagine what prospective applicants are looking for. Does the brochure or description mention everything that's offered, are the benefits prioritized properly, does it emphasize the positive aspects of the job?

Without money, it's hard to be competitive. But you should realize that most dispatchers are **not** in it for the money. I've seen few job brochures that mention the attractions of the area (skiing, sports teams, art museums, etc.). I've seen fewer brochures that mention the rewards of community service, helping others, and being "in the know"--they are substantial, and should be promoted strongly, along with other benefits.

3 Create a pipeline. The days of simply advertising for a job opening and waiting for hordes of applicants to arrive is over. Taking a cue from many other professions (including law enforcement), it's time to create a method of sucking in applicants way back up the career path. First, consider creating a new position in the comm center for either trainee, aide, cadet, Explorer, Scouts or some other paid, part-time position that engineered for promotion to full-time dispatcher by way of a defined path. Many other professions use this method of attracting candidates early, providing them on-the-job training, and slipping them into a career position with few problems. Many law enforcement agencies have such programs, and find them very successful in filling open positions with highly-qualified candidates.

This pipeline should extend to your region's higher education system, including junior colleges, vocational schools and even high schools. You should make contact with the appropriate counselors to determine how you can make contact with promising students, introduce public safety dispatching to them, and guide them into the profession. This could include some type of scholarships, part-time paid jobs, volunteer activities, or other guidance. At the very least, you should be attending every Job Day or Career Day at your local high schools to raise visibility of the profession. You should offer tours, visits or other on-site activities for those who express interest. You should develop printed materials that explain the job, describe the qualifications needed to be hired, explain the rewards and personal benefits, and offer tips and tricks on preparing for the profession.

You have to be **in the field** for all this to work. You can't do most of this work from an office or at a console. You should consider recruiting some dispatchers to perform some of this outreach--tap someone who is still positive about the job, energetic and who has good people skills. A good ambassador can do wonders for recruiting.

4 Recruit, recruit, recruit! This task is a full-time, all-the-time job. You cannot do this every six months or once a year. You have to have an on-going, self-pacing program of gathering in candidates, turning them into applicants, and turning those people into trainees. You should establish a 24-hour point of contact for candidates--somewhere they can telephone, write, e-mail or otherwise reach someone at the center (not your jurisdiction's personnel department). You should establish a method of answering candidate questions and providing them with more information. When they call, they should feel that someone actually **wants** to hire them, so your contact person(s) should be positive and well-briefed. They should be able to explain how to prepare for the job (training, certificates, etc.), how to apply, what to expect afterwards, and to give a rough timetable.

You should establish an on-going sit-along program for serious candidates. You should have hand-outs for them that describe the job tasks, working conditions and benefits of the job. You don't have to sugar-coat the job, or restrict what the dispatchers will tell the sit-along (believe me, they'll give them the straight scoop). Let the dispatchers full explain the job--it's to their benefit to be truthful and honest.

You should consider how to get the word out that you have positions available. Advertising can be expensive, but consider local newspapers, TV or radio ads (they may consider them public service announcements and provide the time for free), billboards or message boards (search for freebies), and other local periodicals. Attend any job fair that is held in your area, and staff the booth with a dispatcher who has hand-outs and a positive attitude. Attend Career Days, speak at local junior colleges and vocational schools. Talk to your agency's personnel officer or firefighter about candidates who weren't hired as a sworn employee--perhaps they would consider applying for a dispatcher position.

There's still competition among public safety comm centers for candidates, but in these tough times, consider teaming up with other comm centers in the region to consolidate recruiting and testing operations. Your advertising dollar will go much further with the support of other agencies, and having a single, unified application and testing process can help streamline the process (see next item).

5 Streamline the process. Nothing will discourage, or simply finish off, a candidate more than an ill-organized, poorly arranged or disinterested application process. Those who do apply should have the feeling that someone knows their name, is personally following their application, and will give them timely information at all stages. You should examine everything you do now to recruit, test and otherwise process applicants and determine how you can simplify it, make it easier, faster and more responsive. You should take photos of those who pass the test and will go on to further testing, so you'll know what they look like.

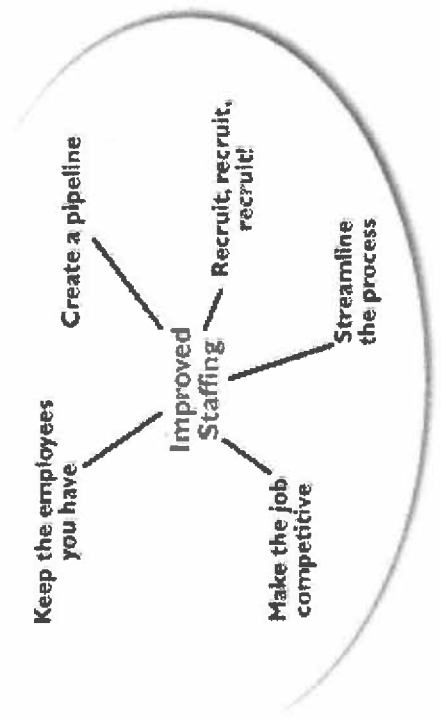
Make it easy on the applicants, too! You should give them a single point of contact who can give them information on the status of their application any time they call--actually, you should be calling **them** with periodic updates. If you can, consolidate testing procedures with other agencies in your region, so that an applicant doesn't have to take time off work for five different agency interviews, but rather just one. **Make it easy** to accomplish everything associated with the application and testing process.

You should also include some type of process to make sure the applicant understands all aspects of the job, so you don't end up spending time on someone who will quit with a week. You can hold an early familiarization meeting with all applicants, schedule them for individual sit-alongs or tours. However you do it, make them familiar with the days of work, hours, shifts, holidays, weekends, etc. so there are absolutely no surprises if they're hired.

There are some public safety comm centers that do their own recruiting, testing and interviewing. Others rely on the jurisdiction's personnel or human resources office. If you operate under the latter scenario, you should make contact with the personnel agency and make arrangements to streamline the process. If necessary, you may have to take over some of the procedures in order to streamline them (for example, applicants call you instead of Personnel). Convince your personnel department that you need the process streamlined in order to attract and keep qualified applicants. Don't leave the entire process to them--by nature they cannot focus enough on the dispatching positions to keep them filled.

Along the same lines, make the process fast. I'm not talking about same-day hiring. However, you're battling time in two ways--the applicant may simply become disinterested in the job over a period of weeks or months, and there are other companies and government agencies who move quickly, and who may offer your applicant a job before you can move. Examine your application, testing, interviewing and other procedures to see where you can shave time, overlap operations or even eliminate steps in order to speed things up. For example, you may be able to hand out a personal history questionnaire to applicants earlier in the process, so if they pass the oral interview, you can ask for it back and begin the background investigation. The applicant should have the impression--if not the reality--that the process is constantly moving forward--test results back, interview scheduled, background investigation being done, etc.

That's it!



APCO Staffing Crisis Task Force

The Association of Public-Safety Communications Officials (APCO) convened a task force to study the issue of comm center staffing in 1999. The group presented its final report at the August 2001 annual conference in Salt Lake City. The report that includes recommendations and best practices, which we have summarized here. You can download a copy of the report in Acrobat, pdf format (2.8 Mb) from the APCO Web site. However, the copy appears to be from a fax, which has certain parts missing or is otherwise unreadable. posted 11-27-2001

Recommendations

#1 - "Reevaluate the 9-1-1 calltaker/dispatcher position to ensure that they are appropriately classified and compensated and that retirement benefits benefit the job, in consideration of the skills, abilities, mission critical nature of the work, responsibilities, work conditions, speed and accuracy of decisions required, stress, shift work, training and certifications required."

#2 - "Review agency work schedules and work conditions in comparison with private and public sector employers who typically compete for employees similar to those sought by Public Safety 9-1-1 communications centers. Determine those employment factors, including work schedules, staffing levels, retention and promotional incentives, financial considerations, etc. best suited for implementation in terms of supporting employee and organizational need."

#3 - "Conduct a comprehensive evaluation of the effectiveness of current recruiting, testing, processing, hiring, training, evaluation and retention practices utilized. Considering that this recruitment is for a very special job, to be filled by a very special person, working under very special conditions, capitalize on the 'special' and pride and satisfaction that is associated with 9-1-1 Public Safety communications and utilize fresh and innovative approaches."

#4 - "Recognize that 9-1-1 calltakers/dispatchers have the same career and retirement ambitions as other public safety personnel. Develop a career ladder structure that provides for recognition and advancement of personnel based on knowledge, skill, training and certification. Review retirement programs in relation to the unique nature and long term stresses associated with of (sic) 9-1-1 calltaker/dispatcher work and the retention of 9-1-1 calltaker/dispatcher personnel."

#5 - "Develop mechanisms that encourage frequent positive recognition of 9-1-1 calltakers/dispatchers within agencies and the communities they serve. This type of recognition has an additional benefit in that it also creates the opportunity to bring positive recognition to the 9-1-1 profession and thus serve (sic) as a subtle recruitment tool."

"The crisis in recruiting and retain 9-1-1 Public Safety calltakers/dispatchers has reached the point where.....

"9-1-1 needs 9-1-1."

Best Practices

1. Job/Positions Classification

Comprehensive and current job/position classifications and descriptions for 9-1-1 Public Safety Communications Center (9-1-1 PSCC) calltakers, dispatchers and supervisors is essential. Classifications must:

- Be based on a detailed audit of all current skills, abilities, responsibilities, authority, training and certifications (Local, County, State and/or National required for position).
- Consider the importance of the position in relation to its impact on safety of the community served, its citizens, businesses and visitors.
- Consider the importance of the position in relation to its impact on the operation of the Law Enforcement, Fire-Rescue and Emergency Medical Service (EMS) agencies of the community
- Consider the importance of the position in relation to its impact on the safety of the Law Enforcement, Fire-Rescue and EMS personnel of those agencies.
- Consider the importance of the criticality of decisions, judgments, speed and accuracy required of the position.
- Consider the degree of multi-tasking required of the position.
- Consider the complexity and multiplicity of technology systems utilized, i.e. multi-line 9-1-1 and non emergency telephone system, Computer Aided Dispatch (CAD) system, multi-channel radio system, Geographical/Mapping Information System (GIS), multi-radio channel/multi telephone line voice logging system, Automatic Vehicle Location (AVL) system, Records Management System (RMS), etc.
- Consider the liability consequences (actual and perceived) relating to the public's expectation regarding standards of service and standards of care.
- Consider the importance of the position in relation to customer service provided and the image and reputation of the agency and the community it serves.

2. Compensation

Appropriate basic and supplemental compensation should be directly related to the classification of a 9-1-1 PSCC calltaker, dispatcher and supervisor.

A. Basic Compensation

- Basic compensation should also consider and be "benchmarked" to other jobs in the private sector that require similar skill, ability, responsibility, authority, training and certification. Note--Basic compensation should not just be "benchmarked" with positions in other 9-1-1 PSCCs. This historically has been the only type "benchmark" utilized and because of its inadequacy has caused all 9-1-1 PSCCs to experience the same type recruitment retention problem, to the degree that

inadequate compensation is one of the causes of the problem.

- Compensation of Law Enforcement, Fire-Rescue or EMS personnel should not be a limiting factor in establishing appropriate compensation for 9-1-1 PSCC personnel.
- Compensation of 9-1-1 PSCC must be adequate to recruit and retain qualified long term career oriented personnel.

B. Supplemental Compensation

- Consider having higher rates of basic pay and overtime pay apply when working with less than pre-established staffing levels.
- Consider having additional rates of pay for employees who have volunteered to work their days off.
- Consider additional compensation for employees who provide management directed training to other personnel
- Consider additional compensation for personnel who achieve additional education credits.
- Consider additional compensation for employees who achieve certain professional public safety communications certifications, i.e. NCIC Teletype Operator, State level NCIC equivalent, EMD, Instructor, etc.
- Consider additional compensation for employees who achieve additional language proficiencies.
- Consider additional compensation for personnel who work non-traditional work hours, i.e. Evenings, Nights, Saturdays, Sundays, Holidays.

3. Staffing

To fulfill the mission of a 9-1-1 PSCC and provide efficient service to the public and the Law Enforcement, Fire-Rescue and EMS agencies served, requires that an adequate number of qualified personnel be on duty in a communications center. When this is not the case the quality of service can diminish and the short and long term affect (sic) on communications center personnel often leads to staffing issues being exasperated, personnel over worked because they are understaffed and attrition rates increasing.

[unreadable]

- Methodologies for establishing adequate and acceptable staffing levels to ensure the service levels expected by the public and required by the Law Enforcement, Fire-Rescue and EMS agencies served should be adopted and utilized.
- A methodology should allow for the identification of the number of qualified on-duty 9-1-1 calltakers necessary to answer 9-1-1 calls and other telephone [unreadable]

- A methodology should allow for the identification of the number of qualified on-duty Law Enforcement, Fire-Rescue, EMS dispatchers necessary to adequately and safely communicate with, provide command and control assistance and manage an acceptable number of Law Enforcement, Fire-Rescue and EMS units on a given number of radio channels.

4. Working Conditions

Considering the inherently highly stressful and extremely demanding environment of a 9-1-1 PSCC, it is vitally important that the working conditions [unreadable] as possible. To achieve the best working conditions possible requires that communications centers:

- Adopt appropriate staffing methodologies
- Allow for employee breaks
- Allow for employees to eat away from their workstation
- Provide adequate initial and ongoing in-service training
- Utilize work schedules that considers (sic) agency and employee personal and family needs
- Provide employees options for special assignments/other duties.
- Sensitivity to the need for employees to take leave.

5. Retirement

Many 9-1-1 PSCC personnel leave the job after only a few years service often because they realize that given the stressful and demanding nature of the job they can not reasonably expect to stay in the job long enough to retire from the job. To address this dimension of the staffing recruitment and retention issue requires that:

- Length of service time for retirement be reviewed in relation to the physical and emotional demands of work in a 9-1-1 Public Safety Communications Center.
- Retirement benefits should provide direct incentives to the recruitment and retention of communications center personnel.
- Retirement benefits should not substantially differ from that of Law Enforcement, Fire-Rescue and EMS personnel.

6. Recognition

9-1-1 PSCC calltakers/dispatchers valuable contribution to the community and its Law Enforcement, Fire-Rescue and EMS agencies often are unnoticed and unrecognized. This is unfortunate and serves to diminish the importance of the

job and lessen the desire of calltakers/dispatchers interest in staying in the job as a career. This lack of recognition combined with other factors adds to the reasons why there is a high attrition rate in these positions. To address this issue:

- 9-1-1 PSCC Supervisors, Managers, Directors should make every effort and seize every opportunity using every means available to bring positive recognition for both daily routine jobs done well and exceptional performance.
- Public safety communications work must be viewed with substantially more value by the public and elected leaders to institute necessary improvements in all areas viewed as causes of problems concerning recruitment and retention in 9-1-1 PSCC.
- 9-1-1 PSCC should regularly participate in community meetings, events, etc. that will expose the community to the valuable role the agency plays in the safety of the community.

7. Hiring Process (Recruitment, Testing and Selection)

The hiring process for 9-1-1 PSCC communications personnel should be deliberate and conducted in a timely professional manner to be competitive with other public and private sector hiring processes.

A. Recruitment

Recruitment of 9-1-1 PSCC personnel must be positive, proactive and deliberate and accentuate the public safety, public service, exciting, life saving, unique and personally satisfying aspect of the job.

- 9-1-1 PSCC should take a active decision making role in all recruitment, testing, interviewing and selection processes.
- Utilize appealing, descriptive materials, i.e. announcement, application, placards, photographs, brochures, videos, Public Service Announcements (PSAs)
- 9-1-1 PSCC personnel needs should be made known to other public safety agencies so that they are aware of the need and can "pass the word".
- 9-1-1 PSCC personnel success stories of lives save, unusual stories, etc. should be handed in the media (sic) so that public understands more fully the important role 9-1-1 calltakers and dispatchers play.
- Recruitment should be ongoing to create a ready pool of potential employees and not wait until there are vacancies to fill thus shortening the time between a vacancy being created and a vacancy being filled.

B. Testing

- Test instruments should be constantly reviewed and evaluated to ensure that they reflect the job classification, position description, contemporary public safety communications practices and identify the ability of an applicant to satisfactorily perform in the position applied for.
- Applicants should be afforded the opportunity to view the 9-1-1 PSCC and interact with on-duty personnel to gain a perspective of that the job (sic) involves to help the applicant understand their own aptitude for the position and to allow them to fully appreciate the 9-1-1 PSCC work environment and requirements.

C. Selection

- Only persons fully meeting all agency requirements should be selected for employment. It may be tempting, considering the vacancies 9-1-1 PSCCs are experiencing, to hire personnel that do not fully meet all agency requirements. To do so would be counterproductive, heighten liability and have a negative impact on current employees.

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General Information



Public Safety

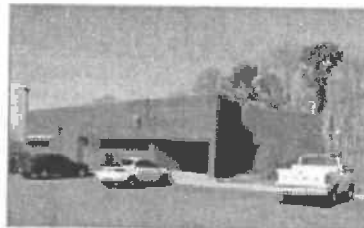
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Job Opportunities

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E-911 Information



Welcome

Welcome to Carroll E-911 Communications. This page has been designed to provide information about Enhanced 911 service, its staff and role as the administrative agency for Carroll County and surrounding cities.

When you think of 911 you probably think of men and women who answer the phone to assist you in an emergency. However, 911 is a dedicated, high-speed phone network with special hardware and software designed to quickly route 911 calls to a pre-defined emergency answering point based on your location.

In Carroll County, Georgia, 911 call-takers and dispatchers assist not only the citizens of our county, but also the personnel from each of the different agencies and departments who respond to calls in our county. We hire employees to answer and dispatch 911 calls coming in on dedicated phone lines for emergency assistance.

The mission of Carroll County E-911 is to provide the best possible, trouble free service for the citizens we serve to access emergency services by dialing 9-1-1; to provide the best tools (equipment and information) to all service provider agencies that will ensure their response and their ability to provide public safety services; and to educate them on the effective and appropriate use of the 911 network.

If you have any questions or want general information, please call our administrative number, 770-830-5922.

A PROFILE OF CARROLL COUNTY E-911

Before 911

Emergency service was accessed by six public safety agencies in Carroll County

agencies were reached by dialing their specific phone numbers and their dispatch obtained and dispatched the information.

Start of 911

Carroll County E-911 began August 1, 1985, with 12 employees. There were three supervisors and nine communications specialists. These employees served 76 of deputies from five law enforcement agencies, 60 fire personnel from the city and 13 fire stations, and 18 emergency medical technicians employed by West Georgia who was the contracted provider.

Present 911 (2000)

We currently have 25 employees, including a 911 director, systems coordinator, coordinator, two senior supervisors, one supervisor, and 19 telecommunicators who provide services to all citizens of Carroll County who dial 911 or any of our administrative lines. These telecommunicators also serve our responder agencies which consist of officers/deputies from six law enforcement agencies, 113 fire personnel from the county's 26 fire stations and 51 personnel who provide ambulance service for Carroll County. There are also numerous other agencies that require our services after hours such as the Department of Family and Children's Services and Carroll County Animal Control.

CAREER OPPORTUNITIES**Expectations**

As an employee of Carroll County E-911, you are expected to assist in the safeguarding of lives and property; to assist in the protection of the citizens and responders of our county; to uphold and abide by the laws of the land and the policies and procedures of this department; to deal with all who come in contact via any means of communication with this department in a professional, courteous, and timely manner; to understand this is a job which requires shifts to be covered on a seven-day-a-week, 24-hour-a-day basis; to represent this department and its county government in professional, caring manner.

Training

Training consists of six months to a full year of on-the-job training. This training includes four hours of TDD (Telecommunications Device for The Deaf/hearing and speech impaired), eight hours of healthcare CPR and 40 hours of emergency medical dispatch training which includes national certification. Georgia law requires that all 911 personnel must attend 40 hours of training to become a mandated communication officer within six months of employment (conducted at the Georgia Public Safety Training Facility in Forsyth, Ga.). Also required is study of a 12-chapter manual, certification for GCI (Georgia Crime Information Center), and intensive training on call-taking and radio communications for each agency we dispatch.

Application & Hiring Requirements

Download E-911 Job Application

This file is located in the right sidebar of this page. You can download it there.

Applications may be picked up during business hours at the 911 center located at Newnan Rd., Carrollton, Ga. When picking up an application, you need to allow for enough time to sign a consent form and to be fingerprinted. The application may be taken with you for completion.

To accompany your completed application, you must provide a copy of your high school diploma (a transcript with your graduation date documented is allowed) or state-is GED (transcript is not allowed), Social Security card, driver's license and a copy of your birth certificate (it must show your full name and date of birth). A naturalized citizen must provide a certified copy of his or her naturalization papers and previous military service.

must be documented with a copy of your DD214.

EQUIPMENT

Emergency operations equipment consists of six combination radio dispatch/call consoles and three call-taker consoles; Prolog/Guardian recording system which a recording of all phone and telephone transmissions; TDD (Telecommunications for the Deaf or hearing/speech impaired) on each console; Four GCIC (Georgia C Information Center) computers located on all law enforcement consoles; two 500-propane gas tanks for backup to the Spectrum 60kw generator; Phase One Serie UPS backup battery; UL-certified lightning protection system; anti-static computer flooring system with water leak detection and alarm system; access control and s system with closed-circuit television and intercoms at the entrance and exit gates doors; and entrance to the communications room.

Our facility is housed in a stand-alone building of approximately 3,500 square fee includes three administrative offices, two restrooms (one with a shower), one slee room that doubles as a storage room, full kitchen, training room, and the commur room.

Efforts and studies are in progress to procure a CAD System (Computer Aided Di with funding from Special Purpose Local Option Sales Tax (SPLOST) monies.

EMERGENCY MEDICAL DISPATCH (EMD)

What is EMD?

The purposes of EMD are numerous and impact many aspects of emergency me care. Some of the areas affected are the quality of patient care, performance of p hospital EMS providers, cost effective allocation of EMS equipment, professional individual EMDs, and the community's EMS experience as stated in Dr. Clawson' "Principles of Emergency Medical Dispatch," second edition.

The information provided to 911 from the questions asked determines the severity call and directs the proper response including the code the units will respond to a type of units to respond. It also provides valuable information to the responders fr protection and scene safety as well as protecting nearby citizens. It allows the res to mentally prepare for the call before they arrive and alerts them to the type of ex which may be required to aid their patient care. This information also alerts the ce to the instructions which are needed to help sustain life or prevent further injury u arrives.

Emergency Medical Dispatch is organized interrogation of persons calling for mer assistance. This is done by using a 32-card file system of medical protocols. The protocols are approved by the local medical authority. The protocols include spec questions, response configurations, and instructions for each medical, traumatic, threatening complaint in the system.

The instructions provided are not ad-libbed. The call taker reads them from the ce system. The instructions include Post Dispatch Instructions which are specific wa advice, and treatments that can be relayed to the caller before EMS arrives. They include pre-arrival instructions. Pre-arrival instructions are medically approved an instructions given to the caller by the trained EMDs. These instructions help to pr necessary assistance to the victim and control of the situation prior to arrival of E1 include airway management and obstruction, CPR, childbirth, bleeding control, ar treatment of shock. All instructions are read word for word to the caller to the full possible.

QUESTIONS, QUESTIONS

Why so many questions?

The questions 911 call takers are trained to ask are not to delay response of needed responders but to enhance the responders' needs and to protect the caller or any citizens. The answers that are provided are relayed to all of the responders who are en route. This relay of information provides the responder with vital information about himself, the nature of the problem, the people it is affecting, the severity of the situation, the protection of the responder and anyone nearby. This information also helps the responders determine whether there is a need for lights and siren or if they can proceed with the flow of traffic. The days when every responder went to every call with lights and siren are over. There are too many other lives that can be affected on the way to the scene. Emergency vehicles are now more accountable than ever before regarding the use of lights and siren. There are many civil lawsuits that involve emergency vehicles in serious or fatal accidents. These persons and companies are held accountable for their actions and must justify their responses. The caller's answers to these questions ensure the right unit is dispatched, the right number of units are sent, in the right order of response. The EMS system as a whole also is utilized more than ever before. Often there are more calls to dispatch than there are responders to send. The information obtained through careful interrogation of the caller allows the dispatcher to correctly prioritize calls and send the units to the calls needing the quickest assistance first. Without this information, the calls would line up and be dispatched in the order they were received. The use of properly trained emergency medical dispatchers can positively influence many aspects of EMS response.

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Intergovernmental Committee Items-Pending

<u>Item</u>	<u>Referred By</u>	<u>Date Referred</u>	<u>Status</u>
E911 Call Center Management	Lawless	12-8-09	Jan 10 Meeting
UK Smoke Free Ban	Lawless	10-27-09	
Groups that Make Board/Commission Nominations	Crosbie	8-11-09	September Committee Meeting
Authority of the Downtown Development Authority: Article 40	James	6-8-09	
Section 2-248 of Code of Ordinances	James	4-8-08	Sub Committee
Grievance Procedures	Myers/ Ellinger	2-5-08	Sub Committee Meeting Pending
Citizens' Advocate Office Draft Policy & Procedures Manual	Myers	8-14-07	
Boards & Commissions That Adhere to Ethics Act Financial Disclosure	Myers	8-14-07	
Boards/Commissions Reporting	Myers	1/16/07	COW Discussion
Council Standing Committees			

<u>Item</u>	<u>Referred By</u>	<u>Date Referred</u>	<u>Status</u>
High Risk Pay Supplement	Gorton	2/14/06	Unknown
Proposed New Compensation System	Gorton	1/15/05	Delayed-Finance & HR

PAS 01.06.2010