

Do You Have Enough Staff? An Update (Part 1 of 2)

By Sasha N. Page

Traffic is coming back, but airport budgets remain very tight. This makes sense, as we've noted in this space before, since operating costs tend to be more fixed and less influenced by short-term changes in traffic or operations (*AM*, November/December 2003, p. 24).

Especially with staffing, airports have tended to be conservative—laying off few staff after 9/11 (although eliminating vacant positions) and holding off on new hiring, even though traffic is up significantly at many airports. But should airports ignore the demands that additional passengers put on services and facilities?

This Measure of the Month revisits the analysis we conducted in 2000 on airport staffing levels (*AM*, November/December 2000, p. 8). Taking advantage of the 2003 AAAE Rates and Charges Survey published this summer, we focus on staffing levels by airport type and, for the first time, on air-

port departments (The latter will be discussed in Part 2 of this article, which will run in the January/February *AM*.)

The 2003 AAAE Rates and Charges Survey

The 2003 Survey includes 145 non-, small-, medium- and large-hub U.S. airports. An airport employee is defined as a direct, full-time equivalent staff member, i.e. not a contract-employee. The Survey takes into account staff "outsourcing" as described below.

Not every respondent answered every question consistently as is typical in such surveys; this limits some statistical analyses. The data is good enough, though, for a number of broad conclusions. The most important: staffing levels grow with enplaned passenger levels (EPAX) and a couple of other factors.

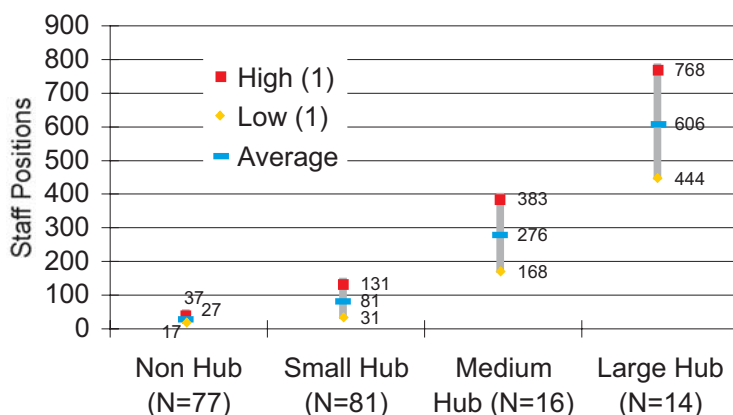
Different positions

It's clear from Figure 1 (Fig. 1) that airport staffing levels vary a great deal by type of airport. The average staff size among the 81 small hub airports is 81 positions. But even for these airports, which handle from several hundred thousand to less than two million EPAX per year, staffing levels vary from 31 to 131 employees within one standard deviation from this average; i.e. staffing levels of two-thirds of small hub airports can be found in this wide range. That makes it difficult for an airport director or board to determine the appropriate staffing strategy. The ranges for medium and large hub airports are equally as large at 168 to 383 and 444 to 768 positions, respectively.

Here is a tool to start making initial staffing estimates: the data suggests that 28 is a minimum number of staffers needed to run an airport. After that, the number of positions grows at about 15,221 EPAX per staff member based on regression analysis (see Fig. 3); an airport should add two staff members if janitorial services are not outsourced; and subtract 103 positions if it is a large hub (over 6.4 million EPAX). Thus if you have 627,835 EPAX, as Maine's Portland International Jetport (PWM) does, this equation would suggest PWM should have around 69 staff members ($28 + (627,835/15,221) + 0 - 0$); PWM reports that it employed 64 people in 2003.

The break in the predicted line between six and seven million EPAX is the best attempt with the available data to describe how staffing at large hub airports exhibits economies of scale. As a large hub, predicted staffing is expected to be 103 positions lower, everything else being equal.

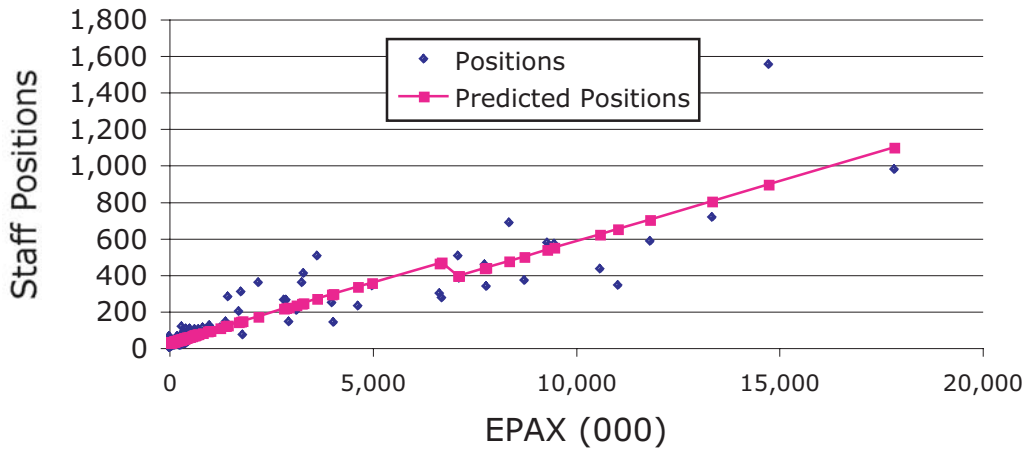
Fig. 1 VARIED SIZES: NUMBER OF AIRPORT POSITIONS BY AIRPORT TYPE



(1) ONE HALF A STANDARD DEVIATION ABOVE (HIGH), OR BELOW (LOW) THE AVERAGE, RESPECTIVELY.

Fig. 2

ACTUAL AND ESTIMATED AIRPORT STAFF SIZES GRAPHED BY AIRPORT'S EPAX



Of course, this equation does not perfectly predict the employment of all airports in the Survey. As Fig. 2 shows, the predicted positions by airport are graphed with actual positions. While there is a relatively straight trend, there is some dispersion around the predicted line.

History repeats itself

Underscoring the fundamental stability of airport management, the above equation varies little from the one we derived in 2000, when we estimated that

it took a minimum of 29 people to run an airport and then an additional staff member per 14,286 EPAX. However, we found in 2000 that larger hub airports have 375 less staff members, everything else being equal. We did not test for janitorial outsourcing at that time.

To be continued

In the next issue of *AM*, Measure of the Month will examine staffing levels by airport department—an exercise that is ultimately more useful for staffing decisions,

but somewhat more problematic since the data is less consistent. 

How does this experience compare to your airport? If you would like to share your ideas and information, please e-mail spage@img-group.com.

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