

## INTRODUCTION

*When developing a plan for converting an exam program to computer-based testing, it is important to recognize that a CBT program usually costs more than a paper-and-pencil exam program. While certain costs associated with paper-and-pencil testing are removed, such as shipping costs for test booklets and the rental of test administration locations, the overall CBT expenses will still typically be higher. The additional expenses for computer-based testing include specific costs associated with the conversion itself, as well as additional continuing costs associated with maintaining a CBT program.*

## TYPES OF CBT COSTS

### Conversion Costs

There are a number of expenses arising directly from the process of converting from paper-and-pencil testing to computer-based testing. Some of these expenses are related to tasks associated with the item bank. First of all, an additional item writing effort is typically needed, in order to supplement the item bank so that a sufficient number of items for computerbased testing will be available. Furthermore, the item bank must be exported from its current database and then imported into the CBT item banking system. For exam programs administering fixed or random CBTs, there are costs associated with the development of additional test forms; exam programs administering adaptive CBTs also have specific conversion costs. There are additional conversion costs related to the need to train internal staff on test drivers and other CBT-related software. Finally, there are conversion costs associated with the production of marketing materials necessary for informing candidates and other stakeholders about the conversion process.

### Maintenance Costs

While the costs associated directly with the conversion are usually one-time or short-term expenses, other costs, associated with maintaining a CBT program, will be ongoing expenses. The increased expenses associated with maintaining a CBT program include the need to continue generating new items for the item bank at a higher volume than was necessary under paperand-pencil testing. In addition, exam programs operating fixed and random CBTs must continue to conduct test assembly, test administration, and standard setting on an increased number of test forms. Adaptive CBT exam programs have comparable additional expenses associated with maintaining the item bank,



administering tests, and classifying examinees. Finally, the fees associated with “seat time” for test administrations at CBT sites are typically much higher than the comparable fees for individual paper-and-pencil test administrations.

### **Summary**

A CBT program will require substantial resources, both for the initial conversion and for ongoing maintenance. An additional consideration worth noting is that converting an exam program to a CBT may result in reduced volume, at least in the short-term. CBT exam programs typically offer an expanded number of test administration dates, and in many cases a number of examinees use that opportunity to delay testing as long as possible. In some voluntary exam programs there are even examinees who elect not to test at all. In both of these instances, whether the reduced candidate volume is temporary or long-standing, the result is a decrease in revenues during a time of increased spending. It is important to consider your exam program’s examinee population in order to determine the impact that this potential reduction in volume may have on program finances.

