

# .....CPS BULLETIN.....

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## Introduction

We thank all those readers who sent in a reply to our **CPS Bulletin** survey for their valuable comments. It is not too late for those readers who would like to participate! We are enclosing another copy of the survey (which is being sent with every copy of the bulletin, regardless of whether or not a survey had been completed previously).

Many of your replies requested an update on the 2001 CSO mortality table, and this quarter's actuarial article focuses on that topic.

Our computer article discusses the burning question of the hour: Should we turn off our computers when they are not being used? The writer had much fun researching the article because what appeared on the face of it to be a simple question turned out to be a topic with many technological facets that we attempted to simplify for our readers as much as possible.

We should like to take this opportunity to wish Jewish fraternalists a happy, healthy and prosperous new year.

We hope that you continue to enjoy receiving this newsletter. If you have any comments or suggestions on how we can improve **CPS Bulletin**, please complete our survey or contact us by visiting our company web site at [www.cpsincorp.com](http://www.cpsincorp.com) ❖

## 2001 CSO And Counting...

A number of respondents to our survey in the last issue of **CPS Bulletin** asked for an update on the 2001 CSO Table. A number of the changes that will occur due to the adoption of the new table were outlined in our September 2001 issue of the **CPS Bulletin**. That issue, as well as all prior issues, is available at our web site ([www.cpsincorp.com](http://www.cpsincorp.com)). In this article, we'll update the current status of the new table and offer our thoughts as to how it might impact fraternal benefit societies.

The 2001 CSO Table has a mandatory adoption date of January 1, 2009. After that date, all new policies issued must be based on the new table. Most states will allow companies to begin using the table sooner than January 1, 2009. The most popular adoption dates are January 1, 2004 and January 1, 2005.

In particular, IL, MA, OH, PA and NJ are aiming to allow companies to use the new table beginning January 1, 2004 and NY is aiming for January 1, 2005.

It is our impression that some fraternal benefit societies regard the new 2001 CSO Table as a "golden bullet" that will help their society sell many new policies and will be a boom to their solvency and financial position. We believe that this is unlikely to happen if fraternalists do not understand the consequences of changing to the new table.

For fraternalists, the 2001 CSO Table will have the following major effects:

- **Reserves** for the new policies will usually be lower (and often significantly lower), especially for traditional products such as whole life and 20-payment life. Lower reserves will mean that reserve increases from year-to-year will not be as great as if the current mortality tables were used, which will help operational results. However, smaller reserves mean that larger losses will occur upon death since the net amount at risk (i.e., the difference between the face amount and the reserve) will be greater under the 2001 Table than the current tables.

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- **Cash values** will also be lower and therefore smaller amounts will be paid on early surrender.
- **Term policies** may be easier to issue at higher issue ages because reserve requirements will not be as great as they are using the current mortality tables.
- If a society converts to the 2001 CSO table, then a **Section 8 actuarial opinion** must be filed. For those societies that are currently exempt from this mandate (which requires the actuary to perform an asset adequacy analysis), additional costs will be incurred annually in order to perform the analysis.

Profitability for a fraternal comes from 3 major sources: gains from mortality, expense efficiency and earnings on assets.

**Gains from mortality:** For a life insurance policy, there is an underlying mortality table that is used to calculate reserves. Many fraternal have very old policies still in force that were based on the American Experience or American Men tables. These tables were developed using mortality data from the late 1800's and early 1900's. Since those members have lived longer than expected, the society has made a mortality gain because the actual number of deaths have been less than the expected number of deaths using those tables. If the actual number of deaths were greater than the expected deaths then the society would have had a mortality loss.

Each time a new mortality table is introduced, the gains from mortality decreases. This is because the expected number of deaths more closely approaches the actual number of deaths. While this will be good news for the insureds (because it results in lower premiums), it reduces the gains that the society makes from mortality. Thus, if a society converts to the 2001 CSO Table and has a corresponding reduction in its premium rates, mortality gains will be reduced.

**Expense efficiency:** Converting to the 2001 CSO Table is unlikely to result in a reduction in the society's expenses. If anything, expenses are likely to increase. One way to achieve expense efficiency is to sell more policies so that the total expenses of the society can be spread over more policies. Many societies could probably issue many more policies than are currently issued without having to hire additional personnel in order to handle the additional workload. Similarly, if a society could issue larger face amount policies, expense

efficiency could be gained since it does not normally cost more to administer a \$1,000 policy than it does a \$10,000 policy (but the premium for the \$10,000 policy is nearly 10 times as much).

If a society converts to the new table and has a corresponding reduction in premium rates, then the society will need to sell more policies and/or larger face amounts in order to bring in the same amount of premium income that it currently collects. If premium income reduces due to the conversion to the new table without a corresponding decrease in expenses, then the society will see a reduction in its operational results.

**Earnings on assets:** Converting to the 2001 CSO Table could cause a decrease in the net investment income if premium rates are reduced. If the cash inflow from new premiums declines, then net investment income will also decline since the society will have less money to invest.

If a society reduces its premium rates when it converts to the 2001 CSO Table, then the reduced income per policy could be mitigated by selling more policies and/or larger face amounts. It should be noted that if a society's current premium for a \$5,000 policy is now \$100 and under the new table it is \$80, the society would have to issue a \$6,250 policy just to collect the same amount of premium. In this case, the society collects the same amount of premium but they are at risk for a larger amount of insurance.

Large insurance companies and large fraternal are likely to reduce their premium rates once the 2001 Table is adopted, which will make it even more difficult for small-to-medium sized fraternal to compete on price. So what are these fraternal to do? In our view, fraternal must continue to play to their strengths, which include membership, tradition and benefits. Premium reductions as the result of adopting the new table should be done selectively. Each society must be aware of the possible loss of income they will experience if they convert to the new tables and lower their premium rates.

One possible strategy is to rearrange premium rates such that the policy fee is taken out of the premium rate and recast as a membership fee or donation. To the extent that such a fee is used for paying scholarships and other fraternal activities, it may be tax-deductible to the member as a charitable deduction. ❖

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## Sleep, Sweet Computer, Sleep

Over the years there's been a debate going on that asks: "Should you turn off your computer every night?" This article will consider the merits for each side of the debate.

There are a number of good reasons for turning off your computer when it is not in use. The most obvious are cost and conservation. According to some estimates, between the monitor, printer and the computer, the cost of leaving each of these items on 24/7 works out to be \$120-\$180 per year depending upon the electricity costs in your area. (Please note, however, that modern flat screen monitors utilize considerably less power than "regular" monitors.) Tufts University estimates that 20 trees are required to counter the annual amount of carbon dioxide emissions produced by running each computer all day rather than only during business hours.

Other reasons for turning off your computer each night include the following:

- Computers are constantly sucking in air to cool down components, all the while pulling in dust, dead skin, cat or dog hair and other fluff, which in turn can cause overheating. Leaving the computer on will only add to the collected debris.
- If something were to happen to the power supply (a power surge, for example) then the computer may overheat, causing damage to major components.
- According to the Lawrence Berkeley National Laboratory, modern hard drives are not significantly affected by frequent "shut-downs" unlike older disks that could have been damaged by frequent on-off cycling.
- All software programs require a certain amount of memory to operate, which is allocated when the program is opened and released when it is closed. Some programs may have bugs in them, which will prevent the memory from being released properly. This may reduce the amount of available memory required by other programs leading to memory errors and illegal operations. Turning off your computer nightly will clear memory and release resources.

In a company's office, however, computers are often left on overnight for a number of reasons. These include:

- Backups of each computer's hard drive are taken at night. If the computer is turned off then no backup would be taken. Please note, however, that in some offices virtually all work is saved on a network rather than a local drive and in that instance there appears to be no need for computers to be left on for backup purposes.
- Certain software programs may run automatically at certain times each night. For example, anti-virus software may be updated nightly. If the computer is turned off, then these programs would not run, or they would have to be scheduled for update during the day.

You might decide to switch off your monitor and printer when your computer is not in use since these items utilize the vast majority of total computer power consumption. The following steps would do this automatically for the monitor (similar to the way a screen-saver would work):

- (1) Go to the Control Panel (which can be found by selecting My Computer or via Start> Settings> Control Panel).
- (2) Select the Power Options icon (for Windows 2000 or XP users) or Display icon (for those using earlier operating systems). If the Display icon is used, you then click on the Power button.
- (3) The Power Options Properties screen will appear. Select a time (e.g., 20 minutes) from the drop-down list next to "Turn off Monitor".
- (4) After making your selection, click the Apply button.

By following these steps, your monitor will automatically shut down if your computer is inactive for the selected time period. To turn the monitor back on, you would just move the mouse.

To save even more energy, you can use the Hibernation and Standby options, where available, to shut down your computer.

**Hibernation** is just short of a complete shutdown. When a PC goes into hibernation, Windows saves your desktop state with all open files before powering down. Each document is saved before your PC goes into hibernation. To start working again, simply press the power button

and logon normally. Your machine starts more quickly because it skips steps associated with starting your computer (such as cache cleanup). When Windows brings your PC out of hibernation, your documents and files will open on your desktop exactly as you left them.

**Standby** maintains your session but keeps your computer running on low power with data still in memory. Unlike hibernation, it does not automatically save your data so you should save your documents before putting the computer on Standby. From a user's point of view, Standby can be compared to a screensaver. The differences are that screensavers do not reduce noise, save energy or extend battery life on your laptop — Standby does.

On the laptop, Standby and Hibernation can be set from the Power Options Properties screen, as described in (3) above. For desktop users with Windows XP, the Standby and Hibernation items can be selected from the drop-down list when you shut down your computer. It is important to note that backups and software updates will not be performed when the computer is in either of these modes.

So what should you do? At a minimum, we'd recommend that you shut down the monitors in your office each night. If your computer's hard drive is not being backed-up nightly and you are not running antivirus software updates daily, then we'd recommend that you use the Standby or Hibernation options. You probably will not recognize a large savings in your electric bill, but you will contribute to saving energy without damaging your computers. ❖

## Interest Rate Monitor

The following are some key interest rate benchmarks:

Benchmark	Current	3 Months Ago	1 Year Ago
Fed Funds	1.00%	1.25%	1.81%
Prime Rate	4.00%	4.25%	4.75%
30 yr mortg	5.67%	4.90%	5.86%

Source:www.bloomberg.com as of September 16 2003.

## Regulatory Update

### Asset Adequacy Testing for Companies and Fraternal Licensed in Florida

The updated Florida Administrative Code requires all FL insurers, including fraternal, to include a summary of the results of an asset adequacy test in the 2003 actuarial opinion. We have been told that FL will not necessarily require fraternal to produce a full-blown cash flow analysis but some study of the matching of assets and liabilities will be required.

### Minimum Guaranteed Credited Rates on Deferred Annuity Contracts

Both New York and New Jersey have put in place an expedited approval process for submitting an endorsement to reduce the minimum guaranteed interest rate for deferred annuities. In fact, we recently obtained approval for the submission of an endorsement to the NY Department in less than one month – a new record! ❖

## About CPS

*CPS Actuaries and Computer Programming & Systems, Inc.*

CPS is an independent company with over 35 years of service to our clients. We offer a wide range of computer, networking and actuarial services, including the following:

- Actuarial valuations
- Annual and quarterly statement preparation
- Policy administration software
- NAIC compliant illustration software
- Web site hosting and e-mail services
- Design, install and maintain local and wide area networks
- Hardware & software installation and upgrades

For more information regarding our services, please call us at **203-324-9203**, or visit our web site at [www.cpsincorp.com](http://www.cpsincorp.com) ❖

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