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## **Turning Green into Gold**

## When New Office Furniture Becomes Sustainable & Economical

by B. Alan Whitson, RPA

Last year I consulted for a company planning a new corporate head-quarters. Typical of many projects, myth and misconception reared their ugly heads early. The design team wanted a green project. The CFO wanted to spend the least amount of money possible. They found mutual ground in one of the LEED-CI credits – specifically re-use of existing furniture.

Sounded like a good idea until a little further analysis showed some major flaws in the thinking. Proceeding with this plan would have resulted in the company spending several hundred thousand dollars unnecessarily. Further, it added an unneeded level of risk to the project. The solution came down to a decision to invest in new office furniture. Reaching this conclusion was easy once you understood the logistics of moving a company.

Moving a corporate facility typically begins mid-day Friday and continues over the weekend as a way to reduce downtime. Getting employee's contents boxed up and out of the workspace is step one. Simultaneously, the IT/telecom group begins the shutdown and removal of computer and telephone systems. Next, the systems furniture is disassembled, loaded into trucks and moved to the new building.

Then the process is reversed. The systems furniture is reassembled. Electricians begin to wire up the panel systems, followed by voice and data cabling all done at weekend labor rates. Next comes installation of telephones and computers - again at weekend rates. Finally the employees' boxes are placed in the workstations. All of this happens as the IT/telecom department begins a series prayers and rituals in hopes that everybody has dial tone and all the computers and servers boot up. If this work is out-sourced, add another premium labor rate to the cost of the move. What could possibly go wrong? Lots - its' been proven time and again that two-thirds of those in charge of a move are fired, demoted or take a leave of absence due to a stress related ailment after the move.

Here's the logic behind the recommendation to buy new furniture and computer monitors:

- ▶The new workstations could be installed weeks before the move and wired for power, voice and data during regular business hours avoiding premium wage rates. This also allows time for the new furniture to air-out.
- ►All power voice and data systems could be checked before the move happens avoiding the risk of downtime.
- ▶The cost for the new workstations is virtually the same as it would cost to dismantle, move and reinstall existing systems furniture particularly when you factor in the weekend wage premium for cabling the power, voice and data.
- ▶The existing systems furniture could be recycled, sold or given to non profit organizations. Since the furniture is fully depreciated, care must be taken not to create a taxable event.
- ▶By purchasing new office furniture, the move is then reduced to a "box" move. However, it's important to insist that your mover use plastic moving boxes on dollies rather than traditional cardboard boxes. There are a number of economic and sustainable benefits. They are faster and easier to pack for employees. These plastic boxes allow more contents to be loaded into each truck thereby fewer trucks and trips are needed. This allows more people to be moved per phase. This reduces the total move window and the associated nonproductive employee time that brackets every move. Finally, it's sustainable as cardboard boxes aren't being sent to the dump after everyone has unpacked. Plastic moving cartons are returned after the move and put back to work on another company's move.
- Moving existing office furniture requires more truckloads than new office furniture due to the way the trucks are packed.
- Shift to 15" LCD monitors rather than staying with existing 17" CRT monitors. LCD monitors use less electricity and generate less heat. This allows



the building's mechanical systems to be downsized saving first cost on the HVAC system and further reducing energy costs. While the initial cost of LCD monitors is about \$100 more per unit, their present value five-year life cycle cost is about \$213 less than a CRT. You'd be surprised how big this number gets.

- ▶LCD monitors are significantly smaller than CRTs, and can be mounted on swing arms freeing up valuable workspace. Currently, 25% of the typical 8' x 8' workstation is dedicated to the CRT. Therefore a 6' x 6' workstation can be used in place of a typical 8' x 8' workstation.
- ▶A high quality 6' x 6' workstation can be purchased that provides improved acoustical and visual privacy, and more work and storage space than the 8' x 8' workstation being replaced.
- ▶Since 6'x6' workstations use less space than 8'x8', half of the saved space would be used for team space. The other half of the saved space was used to reduce the amount of square footage needed thereby saving the company \$4,245 per employee in real estate-related costs.

None of this is rocket science, just some clear thinking and an understanding of what really happens during a move. It's also an area that the USGBC's LEED-CI committee might want to consider revising credits.

(This column is published in conjunction with the Corporate Realty, Design & Management Institute and the Center for Sustainable Real Estate. Click on www. squarefootage.net for a seminar schedule, books, and white papers on sustainability and high performance buildings. Alan Whitson's latest book. Interior Fit Out - Guidelines for the High Performance & Sustainable Workplace will be released this Spring. Moving, expansion, and consolidation will be covered in the new seminar series, Tl's/Interior Fit Out: New Rules for 2005 that begins in mid-May. You can contact Alan Whitson at awhitson@squarefootage.net)