



After a month of voting, changing to a five year state computer replacement cycle received the most votes and is the winner. All four ideas will be implemented and the contest winner was awarded a one ounce palladium coin donated by the Stillwater Mine. Thank you for all the great cost savings ideas and participating in the Montana Accountability Partnership.

-- Governor Brian Schweitzer

## Ideas Voted On

### Cell phone and wireless device reduction



A small agency can spend between \$4300 - \$5000 a month on BlackBerrys. That is over \$50,000 a year. Cell phones are one thing, but BlackBerrys are an expense that as both a state employee and a taxpayer, I don't think I should have to subsidize.

### Conserve electrical use in state data centers



Suggestion: A budget saving ideas for the State of Montana is to reduce the electrical use at state data centers. The problem: Data centers are a major electrical consumer for the commercial sector and most certainly for the State of Montana. At present, most state agencies house their own data centers with little or no accountability for the energy they consume. A recent report to Congress by the Environmental Protection Agency (EPA) shows that data centers consume more electricity in a year than the 250 million televisions in the U.S. The energy used to power and cool data centers has doubled in the past five years, and is expected to nearly double again in the next five. The cost is estimated at \$7.4 billion annually. Computer and server energy use runs a little more than half of a typical data centers electrical cost. Cooling is about 20 percent and lighting 10 percent. Fans, pumps and distribution constitute about 15 percent. Most servers require on average about 200 percent of rated power to accommodate distribution and cooling. According to one industry website, many data centers are overcooled and over-humidified. A recent Computer Economics survey shows that about 44 percent of organizations with data centers do not include any of these electrical costs in IT budgets.

This is also the case with the State of Montana, where most facility electrical use is collectively metered and paid without the benefit of a breakout by type of use. Data centers are often sited into inappropriate spaces that cause overheating in adjacent work spaces and unnecessarily high cooling costs. When profiled for utilization, most companies find that they're running servers at an average of only 5 to 10 percent of capacity. Many servers are powered up once and remain on full-time, using electricity and dumping heat. Many servers are left on because power-down procedures must be performed in a precise, coordinated and systematic fashion. Solutions: The U.S. Department of Energy (DOE) announced on Feb. 19th that it has joined with the EPA and industry leaders to develop energy efficiency measurements, metrics, and reporting conventions for data center facilities. Organizations that collaborated on the guidelines include ASHRAE, the Silicon Valley Leadership Group, DOE's Save Energy Now and Federal Energy Management Programs, the EPA's ENERGY STAR Program, and the United States Green Building Council. This movement to standardize measurement is an important start. In the meantime, data centers should be branch circuit monitored to establish a baseline for energy use: [www.datacenterknowledge.com/archives/2010/01/22/data-center-energy-efficiency-through-bcm/](http://www.datacenterknowledge.com/archives/2010/01/22/data-center-energy-efficiency-through-bcm/). Perhaps most importantly, the branch circuit monitoring of the data centers should be calculated and added to the working IT budget of the agency rather than to the facility or administrative budget. This serves as an immediate incentive to reduce.

## Extend computer replacement cycle



Presently state computers are being replaced every four years. If the replacement cycle was extended to five years this could save the State in excess of \$3 million dollars. This is based on a \$1,200 personal computer purchase price. The savings would be even greater if personal computers were used instead of laptops where portability was not a necessity. A shared laptop pool could be implemented by departments instead of laptops for everyone. Another option for personal computers cost savings would be to virtualized personal computer desktops on servers for those who do not need the performance of a standard personal computer. This cost savings could be even greater than extending the replacement life cycle.

## Motor pool reduction



Car Pool Vehicles: Cut back on the number of your Car Pool Vehicles that you have around the state. When I drive by on Prospect Ave. (Hwy 12 E) by your Highway Department Building there are many vehicles just sitting there and not being used? You should have fewer of these sitting around. This would save you a lot of money in cash layout, maintenance and cost of insurance. One idea is to have your employees start to use their own vehicle when they travel and give them the Federal Government rate. This will pay for the use of their vehicle plus wear and tear. It will save the State a lot of money by not buying and maintaining so many vehicles around the state. Another way to save is to cut back on the maintenance of your vehicles. The new vehicles don't need to have the oil changed every 3000 miles. They can now go approx. 5000 to 6000 miles without an oil change, check the owner's manual in your vehicles to be sure. By your fuel in bulk, it is called hedging your bet. I bet that the State could get a deal from Town Pump and then give people a credit card just to use at their stations; they have them all over the state. I bet you could save 10% a year doing it this way and I'm sure that this would save the State a lot of money.