



## Case Study: Education

# City University of New York Goes “Green” With Its PCs and Saves Nearly \$3 Million

### At A Glance:

- ▶ With more than 400,000 students, 19 separate campuses (each with its own IT department) and nearly 30,000 PCs, City University of New York is the oldest and largest urban public university in the United States.
- ▶ Annual Per PC Energy Savings: 173 kilowatt hours equal to\*:
  - ▶ Over 4,000 metric tons of CO<sub>2</sub> not emitted annually:
  - ▶ More than 700 passenger vehicles not driven annually
  - ▶ 5 year total estimated savings: \$3 million/21,000 metric tons of CO<sub>2</sub> not emitted

*“For CUNY, environmental sustainability is as much about leadership as it is about stewardship, and SURVEYOR has helped us be among the first universities in the country to reduce greenhouse gas emissions created by its PC networks. By helping eliminate energy waste in our PC networks, SURVEYOR has helped reduce the CO<sub>2</sub> emissions that result from electricity generation. Additionally, it is easier to implement than many energy conservation measures, and it had a relatively quick payback, paying for itself in less than 18 months.”*

Ron Spalter, Deputy Chief Operating Officer  
City University of New York

### Serving the Nation’s Top Scholars Makes Heavy Demands On Its PCs

As the oldest and largest urban public university in the United States, City University of New York has a long and illustrious history of providing top-notch education to students of all backgrounds. Since its founding in 1847, City University of New York, also known as CUNY, has grown to encompass 23 institutions spread across 19 campuses in the greater New York area. Its alumni is like a Who’s Who list, including 12 Nobel Laureates, a U.S. Secretary of State, a Supreme Court Justice, mayors, members of Congress, state legislators, actors, writers and many other accomplished professionals. According to a survey by Standard & Poor’s, more top U.S. corporate executives have earned their bachelor’s degrees at CUNY than at any other university in the country.

However, serving nearly 400,000 students each year is not without its price, and as with any public institution, CUNY is constantly looking for ways to keep operating costs down while continuing to provide the high quality education for which it is known. Through an innovative program by its energy provider, the New York Power Authority (NYPA), CUNY found a way to reduce costs while improving the environment: by reducing energy waste from almost 30,000 networked PCs available to students.

### Addressing The Problem of Energy Waste by PCs at CUNY

As PC processing power has grown during the past decade, so has the amount of energy they consume, and CUNY’s large number of PCs has proved to be no exception. According to Lawrence Berkeley National Laboratories, non-residential PCs alone consume \$8 billion in electricity each year in the United States. Up to a third of that amount is wasted simply by leaving PCs on when not in use. In CUNY’s case, its energy provider NYPA had performed due diligence and discovered Verdiem® SURVEYOR software as a way to reduce their

\* source: <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

PC networks energy consumption. In preliminary analysis conducted by NYPA for CUNY, the energy provider found that CUNY could save approximately \$15 per PC per year by installing SURVEYOR – a substantial potential savings of almost \$450,000 annually.

However, implementing a program to measure, manage and monitor energy usage on its PC networks across its multiple campuses would not be without its challenges. Each of CUNY's campuses had its own IT department with separate networks that were not centrally managed. To ensure that SURVEYOR could provide the results from the preliminary NYPA analysis university-wide, CUNY decided to undertake a one-year pilot program to test SURVEYOR in two campuses—each with different network architectures and management systems—to see how each network would work with SURVEYOR.

At the end of the one-year pilot program, CUNY found that it had saved 161 kilowatt-hours per PC, or \$16 per PC per year – more than NYPA's original projections. As a result, CUNY decided to move forward with deploying SURVEYOR across its remaining campuses.

*“With the current technology available, a project like this is easier to implement than many energy conservation measures, with a faster payback. The added benefit is that by helping eliminate energy waste in PC networks, one also reduces the CO<sub>2</sub> emissions that result from electricity generation – so in one step an organization can save money and the environment.”*

**Art Fasolino, Chief Engineer,  
City University of New York**

## SURVEYOR Benefits

So far, CUNY has deployed SURVEYOR to 15 of its 19 campuses, with outstanding results. Key among these is the actual energy savings, which has come in at more than those of the pilot program at 173 kilowatt-hours per PC per year. During the deployment, CUNY encountered additional secondary benefits by using SURVEYOR. Top among these is increased control and visibility for its IT department. At the same time, SURVEYOR has enabled CUNY's IT department to discern who is actually using a PC at any given time. Another unexpected benefit has been the smoothness of the deployment, which CUNY staff said went without a hitch. Finally is the return on investment, which came in under 18 months.

But even more important to CUNY, however, is the environmental impact. With SURVEYOR, CUNY has been able to eliminate more than 4,000 metric tons of CO<sub>2</sub> each year, with minimal effort and at a low cost. For CUNY, SURVEYOR has not only helped the organization reduce operating costs without impacting services, but also helped the environment. In this sense, CUNY has been able to demonstrate that going green not only helps organizations be good corporate citizens, but can also help them positively impact their bottom line.

### Benefits

SURVEYOR has enabled CUNY to:

- › Reduce energy bills by 173 kilowatt-hours per PC per year, for a savings of \$3 million over five years and with a payback of less than 18 months
- › Make a positive impact on the environment by reducing CO<sub>2</sub> emissions by 22,000 metric tons over five years which is the equivalent to 4,320 passenger cars not driven for one year
- › Enhance IT management of networks by giving CUNY's multiple IT departments a greater degree of control over PC power settings and knowledge of who is using its PCs

## Rebates and Incentive Programs

Many energy organizations and utilities recognize the powerful conservation opportunity SURVEYOR provides. They often support its purchase and deployment through discounts, incentives and rebate programs – several programs cover 50 percent or more of SURVEYOR's cost. Contact us to learn more about a possible energy incentive for SURVEYOR in your area.

To learn more, call toll-free **1-866-Verdiem (866-837-3436)**

[www.verdiem.com](http://www.verdiem.com)