

## Conserving Energy and Money

Concerned with rising energy costs, the need to replace inefficient equipment, and upgrade an outdated energy management system, the Connecticut Student Loan Foundation (CSLF) contacted Trane.

### Challenge

- CSLF's HVAC equipment was past its useful life. This led to higher energy costs and comfort issues for the employees throughout the building.
- Their existing Energy Management System (EMS) was a DOS-based Trane Tracer System that had limited functionality.
- Financing the project was a very important issue for CSLF. They requested at least a seven year payback for project approval. Their first plan was to conduct the project over a phase of four years, by replacing one rooftop every year.

### Solution

With the assistance of an energy consultant, Trane conducted a thorough energy study of the CSLF building. The study included modeling the building's energy use and looking for solutions to meet the customers' "Environmental Comfort."

Following the energy study, it was determined that four



Connecticut Student Loan Foundation

### Building Specifications

**Connecticut Student Loan Foundation**  
525 Brook Street in Rocky Hill, CT is a 68,655 square foot, three-story commercial office building built in 1987. The facility is used for commercial office space by the Connecticut Student Loan Foundation and several tenants.



## CONNECTICUT STUDENT LOAN FOUNDATION

Energy Savings, Upgrade of Building Controls and Equipment •  
Rocky Hill, CT

*"CSLF is now managing their building instead of reacting to their building" Stephen Wells,  
Energy Consultant*

Trane IntelliPak Rooftop units, a Trane EMS upgrade and Lighting & Occupancy Sensors would solve CSLF's building problems. This project also maximized the available utility incentives in the State of Connecticut, specifically Cool Choice, Customer Services Program and Energy Express.

### Results

Starting with the initial energy study in June 2005, the length of the project was only 5 months, including the IntelliPak Rooftop replacement and installation of the Trane Energy Management System which was completed by November 2005. The total project cost was \$426,000, the utility

incentives were valued at \$93,235 and the annual energy savings will be \$47,504. CSLF required at least a 7-year payback on the project and Trane provided a 6.94-year payback. The ease of operation and maintenance of the facility has increased with the use of the Tracer Summit Energy Management System. The owners purchased two additional copies of Tracer Summit which allows their maintenance department to remotely access their building system. This project not only saved the CSLF money but also increased the comfort for the employees, due to the newer equipment and building controls.

For more on Trane's solution, visit us at  
[www.trane.com/hartford](http://www.trane.com/hartford)

### Systems Installed



- Four IntelliPak Rooftops
  - o Dual Enthalpy Economizer
  - o CO2 Demand Ventilation
  - o VFD's (Variable Frequency Drives)
- Tracer Summit Direct Digital Control Energy Management System
  - o Controls four IntelliPak Roof Top units, 87 VAV boxes
- Lighting Occupancy Sensors & High Efficiency Replacement Lighting
- Energy Saving Algorithms including:
  - o Optimal Start/Stop
  - o Temperature Reset Control
  - o Demand Limiting

### About Connecticut Student Loan Foundation

Connecticut Student Loan Foundation (CSLF) is a non-profit agency which administers guarantees, finances, and services student loans within the Federal Family Education Loan Program (FFELP) and other alternative student loan programs. By serving as guarantor, lender, and servicer, CSLF borrowers enjoy true 'single source' loan processing from application through repayment. CSLF has over 40 years of experience providing assistance to students and parents seeking to finance a higher education.

Trane IntelliPak Rooftop



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A business of American Standard Companies  
[www.trane.com](http://www.trane.com)

For more information, contact your local Trane office or e-mail us at [comfort@trane.com](mailto:comfort@trane.com)

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