

# Commercial Lighting Program

## KEYBANK – ALBANY, NY REDUCING GLARE WHILE INCREASING LIGHT LEVELS WITH EFFECTIVE ENERGY-EFFICIENT LIGHTING

KeyBank's Park KeyCenter Branch at Washington Avenue and Lark Street in Albany needed to replace the lobby ceiling. This provided Property Manager Doug Winner of Trammell Crow Company the opportunity to upgrade the lighting to a more energy-efficient system. KeyBank also wanted the new system to complement the architecture of their historic building. With the bank's large windows, an attractive interior lighting design would help draw walk-in customers in to this downtown branch.

Doug Winner contacted Ron Galati of Retrofit Design Lighting, a Business Partner Distributor in the New York Energy SmartSM Commercial Lighting Program (CLP). Ron was asked to design a lighting system that not only offered energy savings, but would enhance the bank's image and the building's décor, yield appropriate light levels for the various tasks, and reduce glare.

The KeyBank lobby includes sitting areas, desks for employees, a customer write-up desk, and teller workstations. Each of these different functional areas requires a different light level. The existing lighting system included ten recessed fixtures with screw-in compact fluorescent lamps and fifty 2x4, T-12 fluorescent fixtures, each with four cool white lamps and acrylic lenses. These were inefficient and produced an annoying glare for customers and employees. Consequently, all of the existing fixtures were eliminated.

### ENERGY-EFFICIENT LIGHTING DESIGN AND TECHNOLOGY

In the new design, overall general lighting is provided by 76 low-glare, 2x2 recessed parabolic fixtures, each with two T-8, U-bent lamps. The properly spaced T-8 system uses less energy to produce more light than the old T-12 fixtures: an increase from 20 foot-candles to 50 footcandles. The high-color rendering T-8 lamps have the added benefit of enhancing the appearance of the lobby's furnishings and the tellers quickly noticed the reduced glare on their computer monitors. Additional general lighting is provided by three alabaster dome, pendant-mounted fixtures that blend in with the lobby décor and architecture of the bank. The eight energy-efficient, 26-watt compact fluorescent lamps in each dome fixture also provide extra light above the customer write-up desk. Most of the light from these fixtures is reflected off the ceiling, yielding extra indirect illumination with little or no glare. Customers' eyes are drawn to these decorative fixtures whether they are looking in through the bank windows or standing in the lobby.



"The new lighting system is brighter, makes it easier to read, and is classy. Our employees appreciate the new lighting and our customers love the pendant lights."

– Karen Riscavage,  
KeyBank, Client  
Relations Leader.

### Project Profile

#### Type of Space

Bank lobby

#### Square Footage

3,303

#### Project Objective

Aesthetically pleasing environment with reduced glare and increased light levels.

#### Project Benefits

Proper light levels  
Comfortable work environment  
Decorative appearance  
Lower utility bills

Visual accents are provided by eight strategically placed wall-mounted sconces placed above the line of sight to avoid any potential glare. The two-lamp, 13-watt compact fluorescent lamp fixtures (26 watts per fixture) create a living room like atmosphere to help customers feel more at home.

The three-tier lighting design provides varied illumination levels and offers customers and employees a more interesting and pleasant visual environment. Customers are now drawn into the bank by the attractive and well-lit interior spaces they can see through the windows, with the wall sconces and alabaster pendant bowls serving as attention-grabbing focal points.

## THE BOTTOM LINE

The cost of materials was under \$2.50 per square foot, including the cost of the high quality decorative pendant bowl fixtures. In addition to the energy savings, KeyBank has reduced their wattage load from 8,230 to 5,532 watts, while enhancing lighting levels, improving color rendition, and reducing glare. KeyBank received over \$550 in cash incentive from the **New York Energy \$mart<sup>SM</sup>** Existing Facilities Program for installing qualified energy-efficient lighting.

The T-8 fixtures and wall sconces were readily available from a supplier's stock. The pendant-mounted fixtures had to be ordered from the manufacturer, but were delivered prior to the ceiling replacement work. All the lighting upgrades were completed quickly and efficiently as part of the ceiling renovations, with no additional disruption to the bank employees or customers.

## FOR MORE INFORMATION

The New York State Energy Research and Development Authority (NYSERDA) offers training and incentive opportunities for its Business Partners the New York Energy \$mart<sup>SM</sup> Commercial Lighting Program. Additional programs can help businesses reduce utility costs, including the **New York Energy \$mart<sup>SM</sup>**, which offers financial incentives to businesses for energy-efficient lighting equipment and a variety of other electric-efficiency measures.

To learn more about these incentives and to make your lighting more effective and efficient, visit [www.therightlight.org](http://www.therightlight.org) or call toll-free **1-866-NYSERDA**

## Tech Specs

- Very low glare T-8 linear fluorescent surface mount fixtures
- Good color rendering fluorescent lamps
- Halogen PAR track-mounted accent lights
- Four-zone dimming system, with separate circuits for accent lights
- Occupancy sensors for each zone
- 1.16 installed watts per square foot for general lighting
- Estimated annual kilowatt-hours saved compared to a typical church: 10,937kWh
- Estimated annual energy savings compared to a typical church: \$1,094\*

\*Savings based on \$0.10 per kWh, 3,380 operating hours per year, wattage reduction from dimming system, and reduced operating time from occupancy sensors.