

The AIRxpert 7000 can meet the requirements for LEED IEQ Credit 1

## Boston Public Schools Agassiz Elementary School

### Need

Confirmation of intended ventilation performance of newly installed HVAC system.

**Response** The AIRxpert 7000 continuously monitored dozens of classrooms throughout the day to document the adequacy of outside air delivery.



### Immediate Outcome

Detected that CO<sub>2</sub> levels on all monitored second floor classrooms were consistently higher than those on first and third floor. Engineering staff identified the reason and re-balanced the system

### Longer Term Benefits

Six months later, the AIRxpert data showed the remedy was both adequate and still stable. A second school in the Boston Public School system had been outfitted with monitoring tubes for the AIRxpert 7000 so the monitoring unit could be rotated on a monthly schedule between the schools. This approach effectively shares the cost of monitoring the two schools.

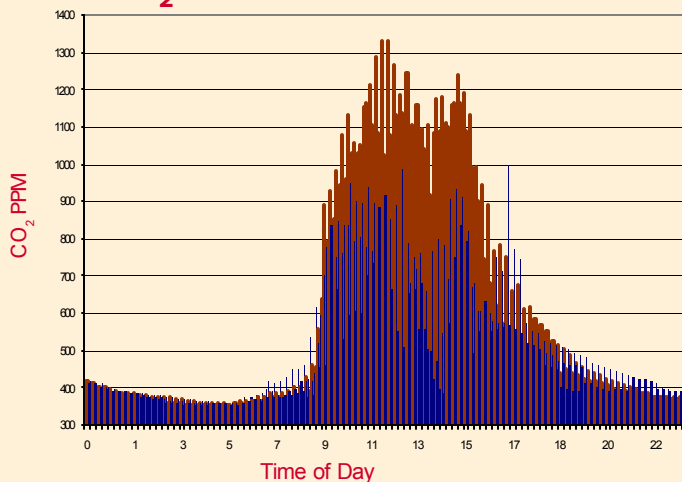
"The AIRxpert data helps my staff manage their time more productively. In turn, this means a better environment in Boston's classrooms."

*Jeff Lane, Environmental Specialist, Boston Public Schools*

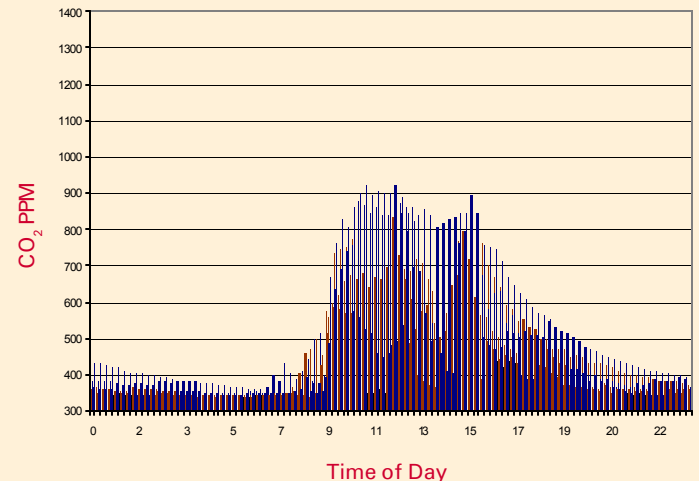
### Future Impact

In the fall of 2002 a third school joined the rotation of the shared AIRxpert 7000. A humidity sensor had been added to the system to investigate moisture levels in parallel with the CO<sub>2</sub> monitoring program. The Boston Planning and Engineering Department recognized the savings available to the School Department. The School Department has purchased a second AIRxpert 7000 to monitor a fourth building. This newest system has been equipped with a carbon monoxide sensor (in addition to the CO<sub>2</sub> sensor), to ensure that no dangerous contaminants are inadvertently drawn into the building from nearby idling vehicles.

### The CO<sub>2</sub> Data



Data from all monitored classrooms clearly shows that 2nd floor CO<sub>2</sub> concentrations (red) were higher than those of the 1st and 3rd floors (blue). It also shows the imbalance was system-wide



Six months after corrective steps were taken, all monitored locations showed more consistent ventilation patterns. Data was collected over several months to allow for seasonal factors. It also confirmed the measure's effectiveness.

[www.AIRXPERT.COM](http://www.AIRXPERT.COM) 781-862-4739

Throughout the day. Throughout the building.