Daylighting

Noise control

Temperature and ventilation

Indoor air quality

Quality of maintenance

Safety and security

Almost half of America's schools—some 30,000—lack naturally lit classrooms and suffer from problems ranging from inadequate lighting and ventilation to poor indoor air quality. A study of 1,500 students in grade schools concluded that better light and ventilation can improve performance and concentration, but the extent of the problem remains largely unknown.

Daylighting

Students with the most daylighting in their classrooms progressed 20% faster on math tests and 26% faster on reading tests when compared to students in the least daylit classrooms.
The National Institute of Mental Health suggests many issues to check when diagnosing ADHD, including hearing.
An abundance of retail space was created during the past two decades and the amount exceeds the capacity of local markets to support it.

The recession
Pressure from discount retailers such as Walmart
The enormous increase in online retailing
205 new stores in the U.S. in 2013
250 new stores in the U.S. in 2014
Vacant Big Boxes

A strain on other retailers
Loss of tax revenues
Economic decline and disinvestment
Targets for vandals
Unsightly

A Solution

Adaptive Re-use

Building Construction

40% of raw materials entering the global economy

85% of total embodied energy is in production and transportation
**Site Analysis**

Zoning  
Safety  
Access and connectivity  
Parking upgrades  
Landscape buffer requirements may have changed

**Structural Analysis**

Seismic bracing  
Wind loading  
Structural grid

**Envelope Analysis**

Roof  
Deck condition  
Insulation  
Connections to supporting members  
Capacity for new loads
Envelope Analysis

Walls (Construction/Insulation)
Glazing (Insulated/Shading Coefficient/Impact Resist)
Concrete Slab Condition (05/0C/Levelness/Cracks)

Hazardous Materials

Asbestos?
Lead Paint?
Ballasts – Light fixtures?
PCB’s in soils?
Radon?

Location and Infrastructure
Total Cost in 2005:
$22,455,424
$153.00/SF

Estimated Cost if New Construction:
$195.00/SF

Estimated Savings From New Construction:
$42.00/SF
$42.00 x 147,000
SF = $6,174,000

*Costs do not include professional service fees.
Program

- 9-station patient simulation lab
- 10-bed associate degree nursing lab
- 5-bed licensed practical nurse lab
- 9-station massage therapy lab
- Medical-assistant office and practice labs
- Phlebotomy medical and blood draw labs
- Surgical-technician suite with 2 mock operating rooms
- Sterile processing lab
Q&A