

# Retrofit or Build New? How Project Teams Are Choosing

Learn more from six great case studies: [BuildingGreen.com/RazeOrRetrofit](https://www.buildinggreen.com/RazeOrRetrofit)

## Reasons to Retrofit

### First-Cost Considerations

- ◆ Operations can continue during construction
- ◆ Projects are completed—and leased—more quickly
- ◆ Renovation costs slightly less than demolition and new construction
- ◆ Historic tax credits might help

### Ongoing Value Considerations

- ◆ Many older buildings are inherently energy efficient
- ◆ Daylighting and natural ventilation may already be built in
- ◆ Many occupants enjoy older-building charm
- ◆ Utility rebates might help

### Climate Considerations

- ◆ Embodied carbon of new construction takes decades to pay back through better energy performance
- ◆ Many older buildings are in transit-oriented neighborhoods

## Decision-Making Tools

- ☑ Energy audit and retrocommissioning
- ☑ Space-needs analysis
- ☑ Comparative first-cost analysis

- Energy audit
- Life-cycle cost analysis
- Cash-flow projections
- Occupant surveys
- IAQ assessment
- Vapor profile or hygrothermal modeling

- Whole-building life-cycle assessment of retrofit vs. new construction
- Transit and walkability analysis

## Reasons to Demolish and Build New

- Program may require an addition, neutralizing cost advantage
- Dysfunctional systems may be too expensive to upgrade
- Seismic retrofits or other code requirements may be cost-prohibitive

- Deferred maintenance may increase costs and payback times
- Some older buildings can't be insulated
- Superior performance or net-zero energy may not be achievable
- Modernizing systems for efficiency and IEQ may not be affordable

- Program may require an addition, neutralizing carbon advantage
- Some gut renos are just as carbon-intensive as new construction