

Description	N/A	✓	Notes
1. Identify specific performance objectives.			
2. Evaluate existing lighting design.			
3. Develop preliminary lighting system design for retrofit:			
a. If existing design meets new needs:			
i. Replace all incandescent with compact fluorescents (MR16 halogens currently have no drop-in replacements);			
ii. Re-lamp and re-ballast to T8 and electronic ballasts. (Replacing fixtures will achieve best performance if moving from a T12 lamp to a T8.)			
b. If new lighting design required (note: simply re-lamping and re-ballasting will increase overall light output; higher energy savings can be achieved by re-designing lighting to meet appropriate lighting level):			
i. Avoid halogen lamps (MR16s) for general lighting (where used for accent lighting, look for alternatives);			
ii. Use indirect/direct lighting fixtures that complement daylight and that can achieve lowest energy consumption;			
iii. Evaluate high output T5 and T8 fluorescent fixtures (instant on, dimming capable, longer lamp life) in lieu of metal halide fixtures.			
4. Develop preliminary lighting control system:			
a. Evaluate occupancy controls;			
b. Evaluate daylighting control scheme, to reduce annual lighting energy consumption. Consider window placement and room layouts, review to optimize.			
5. Estimate the power requirements for future tenant equipment.			
6. Optimize the energy efficiency of vertical transportation systems:			
a. Evaluate occupancy-controlled escalators (cost effective) and high efficiency elevators (potential innovation LEED point).			
7. Develop strategies to shave peak demand.			
8. Summarize lighting issues for Comfort and Productivity Performance Plan.			
9. Review: Does the design of this system complement or compromise any other system?			