



# PRACTICAL CHALLENGES AND SOLUTIONS COMMITTEE

Office to Affordable Housing Task Force

# Structural Issues & Challenges



## Code Related issues



- Construction classification
- Fire Rating of assemblies
- (Beware of fire rated ceiling assemblies)
- Permissible use areas
- Code mandated upgrades (per chosen IEBC compliance method)
  - Change of Use leading to higher Risk Category
  - Ratio of construction costs to value of a property
  - Structural modifications
- HVAC Systems are heavier, therefore stiffening of the structure may be required
- Tighter column bays, may cause conversion issues



## Physical Modifications

- Existing conditions/repairs (perform due diligence or facility condition assessment)
- Coordination/ integration of utilities
  - Slab penetrations
  - Slab openings
  - Horizontal distribution
- Mechanical Equipment Relocated to Roofs
  - Reinforcement of Structure
  - Requirement for Screenwalls
- Vertical transportation/ADA upgrades
  - Stair modifications
  - Elevator modifications
  - External Ramping and Site Work/Retaining Structures
  - Introduction of internal ramps for existing elevation differences

## Structural Issues & Challenges



## Physical Modifications (cont.)



# Structural Issues & Challenges



- Stormwater Requirements
  - Introduction of Greenroofs-Upgrades to existing structure for additional weight and mass
  - Introduction of Bio retention and impact on foundations and adjacent structures
- Expansion
  - Reinforcement of structure for increased gravity and lateral load Resisting systems
  - Potential for IEBC code mandated upgrades



# Structural Issues & Challenges

---



## Related Topics



- Envelope modifications (performance or penetration)
- Conversion to parking
- Conversion from parking
- Conversion of roof for occupancy (See green roof above)



## Zoning Commission/ Zoning Administrator

# Zoning Issues & Challenges

---



- If the project is developed as a PUD, the timeframe for this stage could be in the realm of 6 to 12 months depending details of the case and the level opposition.
- What would be the consequences of the changes in the parking ratios required by the conversion?
  - Could the parking area be added to the conversion?



## Commercial Space/Unit Specs/ Location

## Policy Issues & Challenges

---



- Should these conversions retain some office space and be mixed-use?
  - What would be the consequences of the loss of low-cost office space in the District?
  - How can we retain low-cost office space for neighborhood serving businesses.
- The loss of low-cost office space small business in the class B and C buildings.
- Should these conversions include a range of larger units for families or be allowed to only include smaller units?



## Commercial Space/Unit Specs/ Location

# Policy Issues & Challenges

---



- Most conversions have produced smaller, dark (deep penetration without windows) units because of the original configuration of the structure
  - Would dark units be appropriate for low-income units, especially for families?
  - Market rate renters have choices, low-income renters may not wish to be limited to such a dark unit
- Where is it reasonable to locate these conversions?
  - Across the city, downtown, etc.



# Other Regulatory Issues & Challenges

---



## Other Topics



- Stormwater Management Allowances from DHCD - Cost of storm water upgrades may be an impediment for nonprofit conversion
- Limited budgets, when obtaining agency approvals