Seismic Retrofit of Existing Tall Buildings

- San Francisco’s Pre-Northridge Steel Buildings:
  - 1960s through the early 1990s
  - 50 to 65 welded moment-frames

- Challenges:
  - High cost
  - Occupant disruption
  - Lack of incentives (rent, insurance, etc.)
  - Lack of knowledge

- Opportunities:
  - Innovative solutions
  - Staggered retrofits
  - Making resilience count (link performance to rent costs)
  - Acting before it is too late