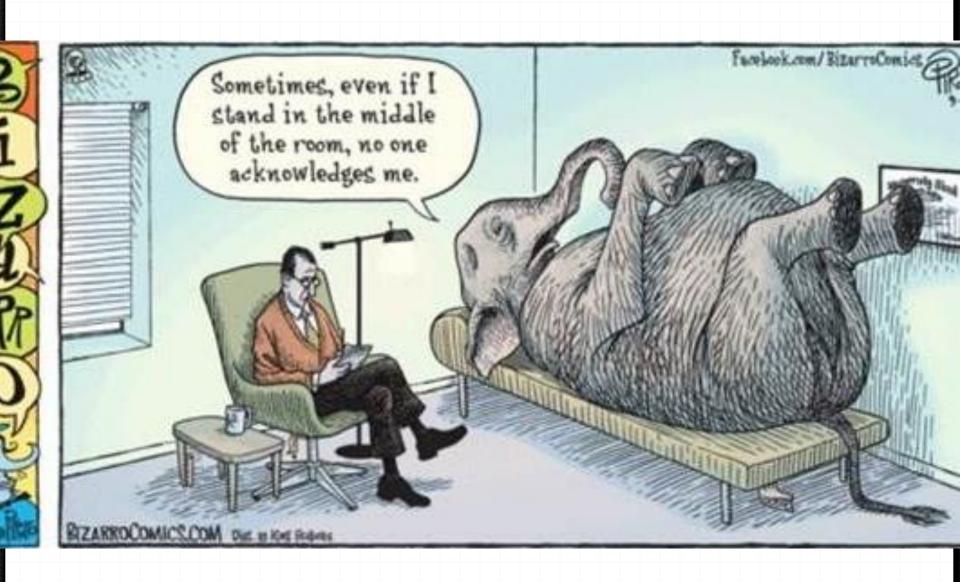
# Identifying & Funding

School Maintenance



# Regulation

- Water quality
- Air quality
- Radon
- Asbestos
- ADA Compliance
- 0??

https://nces.ed.gov/pubs2003/maintenance/pdf/a\_D.pdf

# **Identifying Problems**

#### **EXTERIOR Envelop**

- Walls
  - Exterior Walls
  - Curtainwall
  - Finishes-Ceilings
  - Masonry
- O Roof

- Skylights
- **O** Doors
  - O Doors/Hardware-Exterior
- Windows

#### **INTERIOR ENVELOPE**

- Classrooms
  - Finishes-Ceilings
  - Finishes-Floors
  - Finishes-Walls
  - O Chalkboards & Markerbds
  - Bulletin Boards
- Offices
  - Finishes-Ceilings

- Finishes-Floors
- Finishes-Walls
- Music Room
- Auditorium
  - Auditorium Seating
  - Stage Curtain
  - Handicapped Access

- Media Center
- Art Room
- Science Room
- Life Skill/Home Ec
- Teachers Room
- Technology Ed

- Small Group
- **O**Gymnasium
  - Bleachers
  - Finishes-Ceilings
  - Finishes-Floors
  - Finishes–Walls
  - Gym Partitions

- Cafeteria/MP Room
- Ø Kitchen
- O Nurse
- O Toilet
  Room/Restrooms
  - O Toilet Partitions
  - Handicapped Access
  - Plumbing

- Mechanical Room
- Janitor Closet
- Storage
- **OStairs** 
  - Railings
  - Guard Rails
  - Stair Treads

- Corridors
  - O Lockers
- O Handicapped Access
  - Ramps-Interior
  - Railings
  - O Doors
  - O Doors/Hardware-Exterior
  - O Doors/Hardware-Interior
  - Elevators/Lifts
  - Elevator
- Structural Issues

- OMisc.
  - Sump Pump
  - Swimming Pool
- Power & Distribution
  System
  - Electrical-Service
  - Electrical-Distribution
  - Electrical-Wiring
  - Electrical-Receptacles
  - Electrical-Transformer

#### Communication Systems

- Cable TV System
- Clocks & Program
- Local Area Network
- Public Address System
- Security System

#### Lighting Systems

- Lighting-Exterior
- Lighting-Interior
- Lighting-Theatrical

# Emergency and Exit Systems

- Egress Lighting
- Emergency Generator
- Exit Signs

#### Fire Alarm Systems

- Fire Alarm-Main Panel
- Fire Alarm-Remote
- Fire Alarm-Detection System

## Each Table Is A Group

O Share some of the ways you have funded maintenance, renovation, and new construction (10 minutes)

## Discussion

Each table shares discussing boards

# Suggestions

- Rent to own Private Organizations, business build facility
- Performance based
  - O Doors
  - Windows
  - Lighting

http://www.21csf.org/besthome/docuploads/pub/237\_Fix AmericasSchoolsFinal.pdf

### U.S. Scenario

- Average U.S. public school building is 40 years old, and many are much older
- Ocost of maintaining these schools and facilities in good repair is enormous.
- O GAO and the American Society of Civil Engineers, school districts have chronic deferred maintenance and
  - energy inefficiencies
  - unsafe drinking water
  - water damage
  - moldy environments
  - poor air quality
  - inadequate fire alarms and fire safety
  - compromised building security, and structural dangers

## Scenario, Cont.

- Project to address this backlog could create hundreds of thousands of jobs
  - construction workers
  - building technicians
  - HVAC repairmen
  - electrical workers
  - o roofers
  - plumbers
  - o painters,
  - plasterers
  - Other jobs and laborers
  - building maintenance workers
- Construction and building repair generally create 9,000–10,000 jobs per billion dollars spent.
- Eliminating even half of the entire backlog and improvements could create more than two million jobs
- Addressing even one-tenth of the needed improvements immediately create half a million jobs.
- 1.5 million construction workers are unemployed

## Scenario, Cont.

- Improve teacher and student morale
- Boost student achievement
- Improve the health and safety of school communities.
- Quality teachers are attracted to better facilities, attendance for students
- Students are healthier and achieve more

## **Funding Appropriated**

- Competitive grants according to eligibility rules based on:
  - percentage of poor children
  - need for school repair and renovation
  - limited LEA fiscal capacity
  - estimate of new jobs or extra hours created by the project
  - estimate of energy savings

http://www.21csf.org/besthome/docuploads/pub/210\_Res earchontheImpactofSchoolFacilit iesSince2000-Reformatted2016.pdf



Linda Lemasters, EdD Professor Emerita, GWU lklemasters@gmail.com