Facility Condition Assessments
BEST PRACTICES AND CURRENT TRENDS
An integrated architecture & engineering firm

Specializing in educational facility assessment, planning, design & construction

40 years of service in the Northeastern & Mid-Atlantic regions of the US
Facility Condition Assessment

- Process of analyzing the condition of a facility
- Accomplished by looking at factors like age, materials, design, & assets
- It’s critical to monitor your building’s health and performance
- FCA may be the only thing between you and a maintenance emergency that could negatively impact your operations and those you serve
- You Don’t Know…What you Don’t Know
“Give me six hours to chop down a tree and I will spend the first four sharpening the axe”

Abraham Lincoln
Best Practices

► Define & Communicate the **Reason**
► Define & Communicate the **Goal**
► Define & Communicate the **Timeline**
► Define & Communicate the **Process & Priorities**
► Define & Communicate the **Deliverable**
Ask for what you want and be prepared to get it

Maya Angelou
Best Practices

- Shared Understanding of Resource Availability
  - Funding
  - Staffing
    - Delivering
    - Executing
Case Study

► In 2013 Paid X to Y Consultant
► In 2018 Paying 2X to StudioJAED
► Total Schedule October 2018 - May 2019
► Preparation October 2018 - February 2019
► Field Work February 2019 - May 2019
Reason & Goals

- Know what our **campus condition** is at the moment
- Know what our overall **deferred maintenance** is
- Avoid **unexpected major expenditures**
- Know **where & when** we need to spend monies or not spend monies
- Present the data so that we can make **informed decisions**
- **Present the data** so that it can be updated as a living data set
- Have **confidence in the costs** (by considering all the inputs/exclusions)
Best Practices

- Eisenhower Matrix

Identify Priority
Identify Impact

so that...
Data Driven Decision
This is not a Data Driven Decision!

- Is it Broken?
- Is it on Fire?
How do you Eat and Elephant?
Examples

► New Castle County, DE
  ► County Wide Including Utility Mapping

► Delaware State University
  ► Campus Wide Assessment - Planning

► Rhode Island Department of Education
  ► Statewide Assessment - Executed
Examples

- Brown University
  - Preventive Maintenance Focus

- University of Delaware
  - Building Use Focus

- State of Delaware
  - Statewide Assessment - Consideration
Examples

- Miss Halls School, MA
  - Campus Wide Assessment in Preparation for Master Plan Update
  - Paralyzed by the lack of a process and insufficient data **Unable to Prioritize**
    - Life Safety of Occupants
    - Warm Safe & Dry
    - Program Development
    - Recruitment & Retention
    - Energy & Cost Savings
We Completed Our Facility Condition Assessment... Now What?

Philip Conte, AIA, NCARB
Pamela Babuca, ALEP, ASID
Robert Aldrich, CEFP
Current Trends

- Assessments are Targeted & Specific
- Multiple Pilot Studies are Conducted
- Assessment and results inform an Action Plan
This is not an Action Plan!
Current Trends

Assessments and the results are S.M.A.R.T.
Leadership / Board Expectations

- Explain technical things to not so technical people!
FCA is not an ADA Audit

- ADA Existing Building Checklist Includes:
  - Priority 1: Approach & Entrance
  - Priority 2: Access to Goods & Services
  - Priority 3: Toilet Rooms
  - Priority 4: Additional Access - Drinking Fountains, Public Telephones & Fire Alarms

https://www.ada.gov/2010ADAstandards_index.htm

https://www.adachecklist.org/checklist.html
FCA is not a Security Assessment

Resource:
https://safehavensinternational.org/services/school-safety-assessments/
“One Size Does Not Fit All, But…”

- Kick Off, Standardization, Modeling
- Pilot Study
- Report Designing
- Delivery Method
- Post Assessment Follow-Up
Roles & Responsibilities

- Investigators
- Navigators
- Wrestlers
- Artists
- Heroes
- Villains
Pilot Study

- Benefits
  - Formatting
  - Goal Setting
  - Manage Expectations
  - Determine Challenges
  - Deliverable Approval
Implementation

- Engagement - Early & Often
- Groundwork for future decision making
- Carefully planned & methodically executed
  - Workshops & Presentations
  - Bi-Weekly Reviews
  - Bi-Annual Reviews
Implementation

- Workshops & Presentations
- Strategic Graphical Communication
- Minimal Time Commitment
- Knowledge Building
- Stakeholder Alignment
Reporting - Interesting Facts

- 8 Seconds
  - Our Average Attention Span

- 9 Seconds
  - Average Attention Span of a Gold Fish

- We are Officially Attention Deficient
Reporting - Fundamental Factors

- Big Ideas in an Accessible Format
- Snack Size Content
- Content with Visuals is retained 6X more
- Content with Visuals get 95% more engagement
- Visuals are the language of the digital era
“Snackable Content”

- General Building Information
- Space Use by Floor
- Structural Frame & Building Envelope
- Interior Construction
- HVAC System
- Electrical System
- Plumbing System
- Life Safety / Fire Protection
- Conveying Systems
- Site Conditions
- Utilities
Reporting Visuals

Recommended Priority List – Scope of Work

- Fire Alarm & Protection
- Electrical
- Plumbing
- Mechanical
- Interior Construction & Finishes
- Building Envelope & Site Work

Scope of ALL Work by System Type

- Building Envelope & Site
- Mechanical
- Electrical
- Interior Construction & Finishes
- Plumbing
- Fire Alarm & Fire Protection

December 2018
Reporting Visuals

![Prioritizing the “Value”](chart.png)
Have a Post FCA Follow Up Plan

- Weekly Teleconferences
  - Building Review
- The “1 Pager”
- Each “End User” needs something different
- Schedule in Advance & Optional Participation
- Plan to update FCA in 5 years
Facility Condition Assessments

BEST PRACTICES AND CURRENT TRENDS
Examples

- Miss Halls School, MA
  - Conduct FCA for 19 Buildings, 181,968 sq.ft.
  - Team Composition
    - Architect
    - Mechanical Engineer
    - Electrical Engineer
    - Accredited Learning Environment Planner
    - Certified Cost Estimator

December 2018
Current Trends

- Begin with a Documented Strategy
  - Developed Internally or Externally
Documented Strategy

Do you have, and are able to communicate, a...

- defined Reason
- defined Goal
- defined Timeline
- defined Process with Priorities
- defined Deliverable
S.M.A.R.T. Assessment & Results

- Project is **Specific**
- Project has **Measurable** results
- Project goal is **Attainable**
- Project is **Relevant**
- Project is **Time-Bound**
Project Types

- High Priority / High Impact Projects
  - Thermal Comfort
  - Indoor Air Quality
  - Security Enhancements
Project Types

- High Priority / Low Impact Projects
  - Building Envelope
    - Roof / Windows
  - Fire Protection
    - Fire Alarm / Fire Suppression
  - MEP Distribution

High Priority
- High Impact
- Low Impact

Low Priority
- High Impact
- Low Impact
Project Types

- Low Priority / High Impact Projects
  - Interior Finish Renewal
  - MEP Fixture Replacement
  - Power / Data Access
  - Things people “touch”
Project Types

- Low Priority / Low Impact Projects
  - Landscaping & Hardscaping
  - Signage
  - Support Spaces

Cell descriptions:
- High Priority
- High Impact
- Low Priority
- Low Impact
Commentary

- Not all FCAs are created equally
- Data collection is not really different
- Report formatting varies depending upon
  - Administrators are in agreement?
    - Monies
    - Current condition of the assets
- Confidence with the asset condition
  - How much is needed – and where – over the next ten years,
  - Avoid saddling successors with overwhelming stewardship expenditures