# Miss Hall's School
# Making Your Facility Condition Assessment a "Living Document"

BEST PRACTICES AND CURRENT TRENDS

JUNE 2019

SNEAPPA
Southern New England Chapter of APPA

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# Project Introduction
# Miss Hall's School

# Project Introduction

- *Commissioned by Board of Trustees – Facilities & Compliance Comm.*
- *RFP released to 14 pre-selected firms in January 2015*
- *Scope of Work*
  - *Facilities Evaluation*
  - *Facilities Condition Assessment*
  - *Building Systems Report*
  - *Laying the groundwork for an update to our 2009 Campus Master Plan*

# StudioJAED

- *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*

# Learning Objectives

- Successful FCA Process
- Successful Integration of Decision Makers
- Harnessing the power of the FCA
- Successful Implementation of FCA

# Facility Condition Assessment

- Process of analyzing the condition of facilities
- Evaluate factors like age, materials, design, & assets
- 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"

## 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

# 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?

# Prioritize Needs

- 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

# 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!

## "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

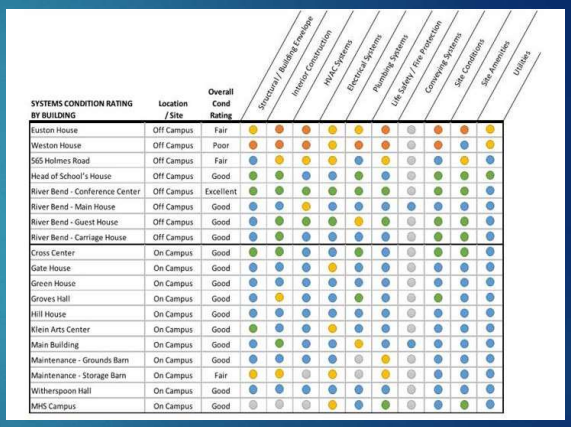
- Benefits
  - Formatting
  - Goal Setting
  - Manage Expectations
  - Determine Challenges
  - Deliverable Approval

# Implementation

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

# Implementation

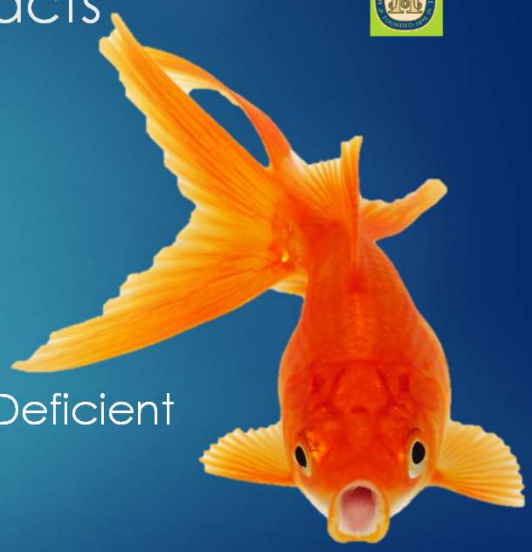
- Workshops & Presentations
  - Strategic Graphical Communication
  - Minimal Time Commitment
  - Knowledge Building
  - Stakeholder Alignment



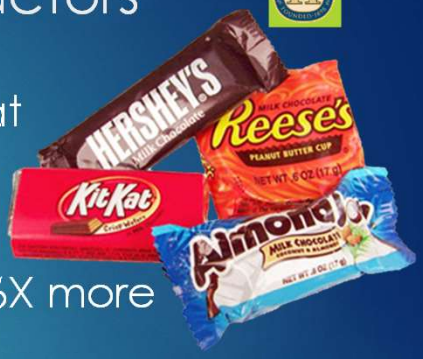
| SYSTEMS CONDITION RATING BY BUILDING | Location / Site | Overall Cond Rating | Structural / Building Envelope | Interior Construction | HVAC Systems | Electrical Systems | Plumbing Systems | Life Safety / Fire Protection | Conveying Systems | Site Conditions | Site Amenities | Utilities |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Euston House | Off Campus | Fair | | | | | | | | | | |
| Weston House | Off Campus | Poor | | | | | | | | | | |
| 565 Holmes Road | Off Campus | Fair | | | | | | | | | | |
| Head of School's House | Off Campus | Good | | | | | | | | | | |
| River Bend - Conference Center | Off Campus | Excellent | | | | | | | | | | |
| River Bend - Main House | Off Campus | Good | | | | | | | | | | |
| River Bend - Guest House | Off Campus | Good | | | | | | | | | | |
| River Bend - Carriage House | Off Campus | Good | | | | | | | | | | |
| Cross Center | On Campus | Good | | | | | | | | | | |
| Gate House | On Campus | Good | | | | | | | | | | |
| Green House | On Campus | Good | | | | | | | | | | |
| Groves Hall | On Campus | Good | | | | | | | | | | |
| Hill House | On Campus | Good | | | | | | | | | | |
| Klein Arts Center | On Campus | Good | | | | | | | | | | |
| Main Building | On Campus | Good | | | | | | | | | | |
| Maintenance - Grounds Barn | On Campus | Good | | | | | | | | | | |
| Maintenance - Storage Barn | On Campus | Fair | | | | | | | | | | |
| Witherspoon Hall | On Campus | Good | | | | | | | | | | |
| MHS Campus | On Campus | Good | | | | | | | | | | |

# 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

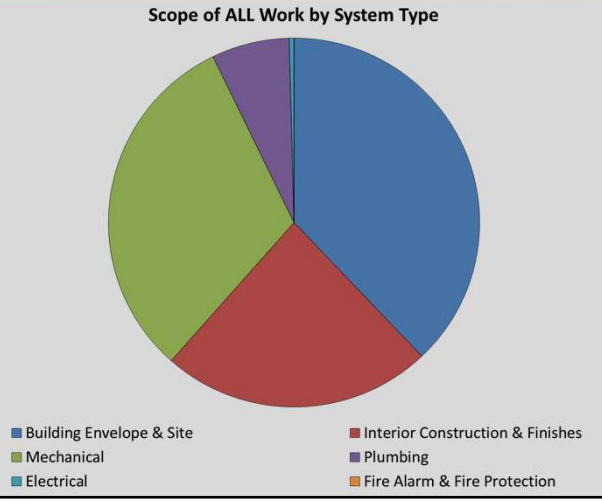
# "Snackable Content"

- 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

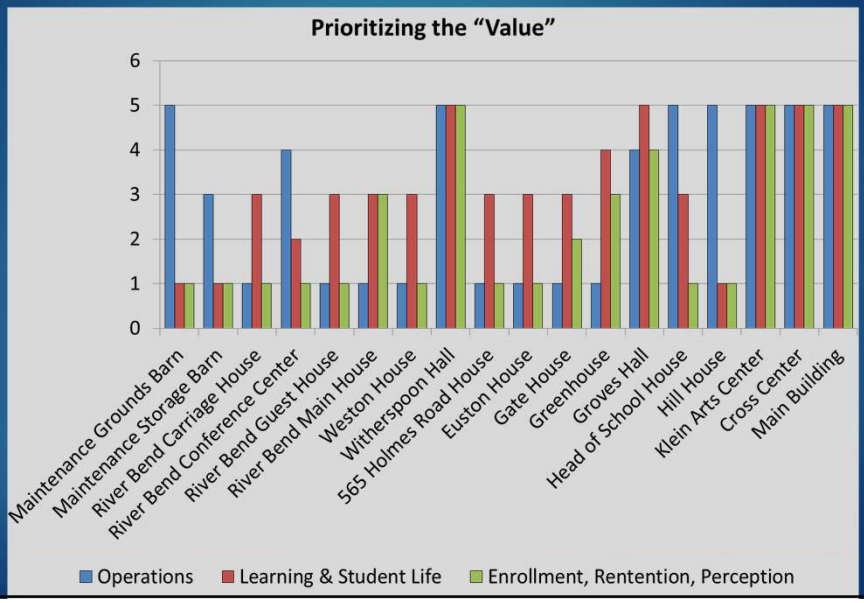
MHS - 565 Holmes Road

| General Building Information | |
|---|---|
| Estimated Construction Date | 1960 |
| Estimated Renovation Date(s)/Notes | 2002 (Roofing) |
| Estimated Gross Area (SF) | 2,304 |
| **Space Use by Floor:** | |
| Basement | Residential - Mechanical Space |
| 1st Floor | Residential (Kitchen, Dining, Living Room, 4 Bedroom, 3 Bathroom, Sitting Room) |
| **Construction / Systems Description & Condition** | |
| **Structural Frame & Building Envelope** | **Excellent / Good / Fair / Poor** |
| Foundation | Good - Cast In Place Concrete |
| Structure | Good - Wood Frame |
| Exterior Finishes | Fair/Poor - Wood Siding (100%) |
| Exterior Doors | Fair/Poor - Wood |
| Exterior Windows | Fair/Poor - Wood |
| Roof | Good - Asphalt Shingle (100%) |
| **Interior Construction** | **Excellent / Good / Fair / Poor** |
| Interior Walls | Good - Gypsum |
| Interior Floors | Good/Fair - Carpet (60%), Resilient (15%), Ceramic Tile (10%) |
| Interior Ceilings | Good - 100% Gypsum |
| **HVAC Systems** | **Excellent / Good / Fair / Poor** |
| Heating & Cooling Generation | Good - Gas Fired Furnace w/ Split System A/C; Excellent - Gas Fired Heating Stove |
| Heating & Cooling Distribution | Good - Ductwork |
| Terminal Units | N/A |
| **Electrical Systems** | **Excellent / Good / Fair / Poor** |
| Electrical | Good - 200A - 240V/120V - Residential Service |
| Telecommunications / Data | Good - Residential Service |
| **Plumbing Systems** | **Excellent / Good / Fair / Poor** |
| Plumbing | Copper Piping; Copper/Cast Iron Sanitary; Excellent - Gas Fired Domestic Hot Water Heater (50 Gal) |
| **Life Safety / Fire Protection Systems** | **Excellent / Good / Fair / Poor** |
| Fire Protection | N/A |
| Fire Detection | Poor - Smoke Detectors In Some Rooms Missing |
| Security System | N/A |
| **Conveying Systems** | **Excellent / Good / Fair / Poor** |
| Conveying Systems | N/A |
| **Site Conditions** | **Excellent / Good / Fair / Poor** |
| General Description | Poor - Dirt Vehicular Roadways and Parking; Poor - Site Grading |
| **Site Amenities** | **Excellent / Good / Fair / Poor** |
| General Description | N/A |
| **Utilities** | **Excellent / Good / Fair / Poor** |
| General Description | Good - Gas, Poor - Domestic Water, Good - Electric |

# Reporting Visuals


# Reporting Visuals

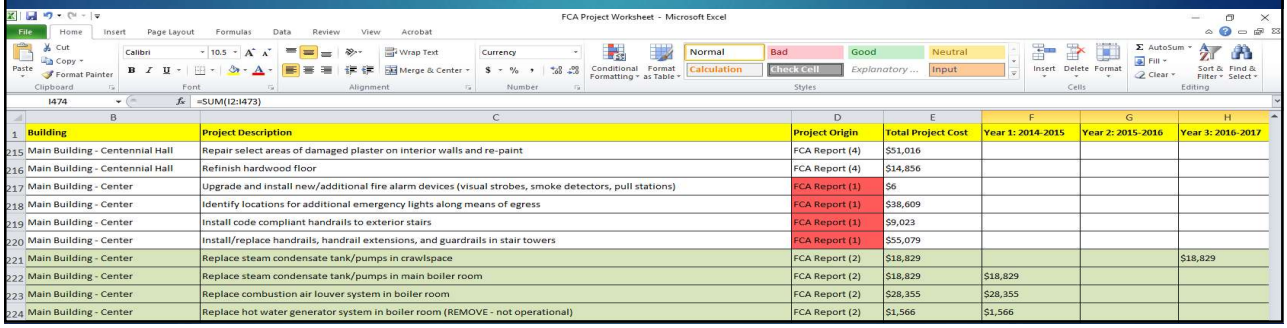


# Have a Post FCA Follow Up Plan

- Weekly Teleconferences by Building
- The "1 Pager"
- Each "End User" needs something different
- Schedule in Advance & Optional Participation
- Plan to update FCA in 5 years

# Lessons Learned

- Manipulating data for specific users
- Customized spreadsheet
- Factors for calculating FCI




| | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|
| 1 | Building | Project Description | Project Origin | Total Project Cost | Year 1: 2014-2015 | Year 2: 2015-2016 | Year 3: 2016-2017 |
| 215 | Main Building - Centennial Hall | Repair select areas of damaged plaster on interior walls and re-paint | FCA Report (4) | $51,016 | | | |
| 216 | Main Building - Centennial Hall | Refinish hardwood floor | FCA Report (4) | $14,856 | | | |
| 217 | Main Building - Center | Upgrade and install new/additional fire alarm devices (visual strobes, smoke detectors, pull stations) | FCA Report (1) | $6 | | | |
| 218 | Main Building - Center | Identify locations for additional emergency lights along means of egress | FCA Report (1) | $38,609 | | | |
| 219 | Main Building - Center | Install code compliant handrails to exterior stairs | FCA Report (1) | $9,023 | | | |
| 220 | Main Building - Center | Install/replace handrails, handrail extensions, and guardrails in stair towers | FCA Report (1) | $55,079 | | | |
| 221 | Main Building - Center | Replace steam condensate tank/pumps in crawlspace | FCA Report (2) | $18,829 | | | $18,829 |
| 222 | Main Building - Center | Replace steam condensate tank/pumps in main boiler room | FCA Report (2) | $18,829 | $18,829 | | |
| 223 | Main Building - Center | Replace combustion air louver system in boiler room | FCA Report (2) | $28,355 | $28,355 | | |
| 224 | Main Building - Center | Replace hot water generator system in boiler room (REMOVE - not operational) | FCA Report (2) | $1,566 | $1,566 | | |

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