



# From Bind to Breakthrough

## Palm Beach County's Asset Management Success Story

David Dolan (SDPBC) & Bill Roth (Roth IAMS)



FEFPA Summer Conference  
July 23, 2024



**YOUR  
BEST  
CHOICE!**  
THE SCHOOL DISTRICT  
OF PALM BEACH COUNTY

A High-Performing School District

## Agenda

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- ▶ Purpose
- ▶ Introductions
- ▶ The Bind – Summer 2023
- ▶ The Solution
- ▶ The Program is Born
- ▶ Q&A





## Purpose

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To provide an overview of SDPBC's on-going facility asset management program, which was initiated by an accelerated bond referendum and is continuing as part of a longer term data-driven strategy



## Introductions

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**David Dolan**  
**Chief of Facilities Management**  
**School District of Palm Beach County**



**Bill Roth**  
**President & CEO, Roth IAMS**  
**Co-Founder, SLAM Technologies**



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## The Bind – Summer 2023

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- ▶ SDPBC is currently in Year 7 (2017 to 2026) of a robust 10-year, \$1B referendum to address Deferred Capital Renewal and Maintenance Backlog
- ▶ Original Plan was to do another referendum in 2026 to extend and enhance the maintenance level of all schools
- ▶ District priorities evolved and the referendum was moved up to 2024, leaving **6-months** to gather an updated Facility Condition dataset for over **30 Million sq. ft.** of schools (deadline Feb 2024 for ballot initiative)

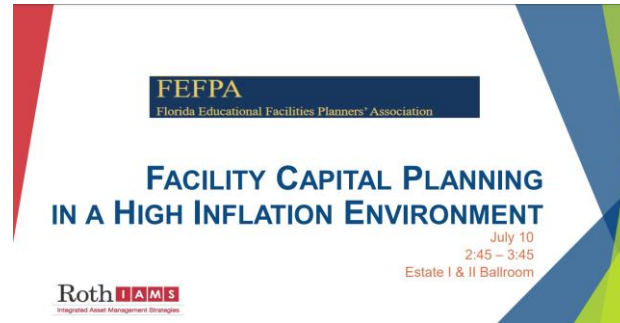




## FEFPA Plays a Role

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- ▶ During the FEFPA Summer 2023 conference, Dave attended the presentation Facility Capital Planning in a High Inflation Environment given by Bill



- ▶ Dave then visited Bill's booth and furthered the discussion, while explaining his facility condition needs and condensed timeline.



## Streamlining & Satisfying Procurement

- ▶ With only 6 months to gather the data, SDPBC needed to get started
- ▶ Partnered with Procurement Team to leverage the Roth IAMS Sourcewell contract for Facility Assessment and Planning Services
- ▶ Scope was negotiated and contract was signed in a matter of weeks vs. several months that a traditional RFP would have taken

Sourcewell  
Formerly NJPA

Awarded Contract

Contract # 020421-RTH



## The Bind Part 2 – How to Do It?

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- ▶ Conventional Facility Condition Assessments would have required 12 to 15 assessment teams to complete in the time required
  - ▶ 180 schools/215 facilities in 6 months - Would have overwhelmed the District staff
  - ▶ Data quality and consistency would have suffered due to the extreme rushed nature of the need
- ▶ Had to develop a defensible approach that would meet the current needs, while also laying the foundation for a more detailed program







## What Was At Hand

- ▶ Existing FCA data collected by District staff in 2016 was available, but it had not been updated
  - ▶ Previous Referendum only targeted Priority 1 and 2 items (based on SDPBC opinion of criticality)
  - ▶ Approximately 40% of total renewal needs
  
- ▶ List of completed capital projects since 2016 was also available
- ▶ Current Replacement Values (CRVs) for each facility

Index	Category	Condition Description
86 - 100	Excellent	Very few defects.
71 - 85	Very Good	Minor deterioration.
56 - 70	Good	Moderate deterioration. Materials function may be somewhat impaired.
41 - 55	Fair	Significant deterioration. Materials function is impaired, but not seriously.
26 - 40	Poor	Severe deterioration over a small percentage of the Materials.
11 - 25	Very Poor	Critical deterioration has occurred over a large percentage or portion of the component.
0 - 10	Failed	Extreme deterioration has occurred throughout nearly all or the entire Materials.



## The SDPBC Philosophy

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Year	Task	Details
0	Build New	
12	Refresh	Update finishes and short lifespan element
25	Renew	Major Upgrades to MEP and other systems
37	Refresh	Additional update finishes and short lifespan element
50	Replace	Facility reaches the end of its useful life



## The Breakthrough – Step 1 – Lifecycle Model

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- ▶ Developed a high-level lifecycle model for each school
  - ▶ Date of Construction
  - ▶ Square Footage
  - ▶ Unformat II Level 1 and Level 2 Element Breakdown
  - ▶ Percentage of CRV for Each Unformat Category
- ▶ Projected Future Capital Renewal Needs for each Unformat II Category

### UNIFORMAT II

**A Recommended Classification  
for Building Elements and  
Related Sitework**



## The Breakthrough – Step 1 – Lifecycle Model

Uniformat	Uniformat Name	EUL	% of CRV
A	Substructure	75	6%
B10	Superstructure	75	5%
B20	Exterior Enclosure	44	11%
B30	Roofing	27	7%
C	Interior Construction	30	4%
C30	Interior Finishes	12	2%
D10	Conveying	30	1%
D20	Plumbing	30	8%
D30	HVAC	35	20%
D40	Fire Protection	40	4%
D50	Electrical	40	14%
E	Equipment and Furnishings	22	2%
F	Special Construction and Demolition	30	3%
G	Building Sitework	40	13%



## The Breakthrough – Step 2 – Bringing it Up-to-Date

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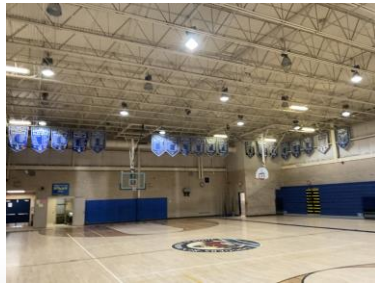
- Aligned the completed capital projects to the modeled Uniformat II structure
- Updated the date of installation and lifecycle replacement based on the actual work completed
  - Future Lifecycle Replacements were created



## The Breakthrough – Step 3 – Taking it to 2026

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- ▶ Updated projects planned for 2024, 2025 and 2026 based on the previous referendum
- ▶ Adjusted all values into 2026 dollars, based on an assumed inflation rate of 4%
- ▶ Removed schools that were being considered for replacement from the analysis





## The Breakthrough– Step 4 – Getting Bond Ready

- ▶ Applied the same percentage (approximately 40%) of critical items (Priority 1 and 2 from 2016) to the current dataset
- ▶ Forecasted the 2026 to 2035 Capital Renewal Needs
- ▶ Inflated the future needs by 4% annual rate
- ▶ Added a single line-item contingency to allow for greater flexibility of management compared to adding a percentage to each individual line item





## The Breakthrough- Step 4 - Getting Bond Ready

- ▶ Created a single, consolidated worksheet that provided the source data as well as all the analysis
  - ▶ Data provided for each individual facility
  - ▶ Rolled Up Data to address the entire Portfolio
  - ▶ Reviewed with Senior Leadership within the District
- ▶ Submitted to Bond Rating Agency for their review in early 2024







## The Program is Born – Where to Now?

- ▶ Desire to evolve the program so that data drives the decisions on what capital renewal work gets done
- ▶ Need a more detailed dataset beyond the model completed for the Referendum
- ▶ Embarking on a District-Wide Facility Condition Assessment Program
  - ▶ Element-Level Inventory being collected
  - ▶ Pilot Phase recently completed to set the data standard and scope of work

### BENEFITS OF DATA-DRIVEN DECISION MAKING





## The Program is Born – Where to Now?

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- Modelled Dataset

Uniformat Code	Date of installation	EUL	Replacement Year	Cost
D30-HVAC	1967	35	2024	\$2,000,000



# The Program is Born – Where to Now?

- FCA Dataset – Element-Level Inventory

Uniformat Code	Date of Installation	EUL	Replacement Year	Quantity	Unit of Measure
D302002 Hot Water Boiler	1988	30	2024	625.5	MBH
Condition	Make	Model	Serial No.	Unit Cost	Recommendation Cost
Poor	Burnham Corporation	EL.20.SPL.G.GP	22115	\$115	\$71,933
Description Narrative			Condition Narrative		
Building heating is provided by a natural gas-fired heating water (cast iron) boiler. The boiler manufactured by Burnham Corporation is Model No. EL.20.SPL.G.GP, Serial No. 22115 and as a heating capacity of 625.5 MBH (625,500 BTU/hr).			Deficiencies observed at the time of the assessment included corrosion and reports of poor performance. Given the observed deficiencies and age, a lifecycle replacement is recommended in the immediate to short term.		
Element Photo			Element Photo		
					
Heating Water Boiler			Boiler Nameplate		



## The Program is Born – Where to Now?

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- ▶ Implementing the SLAM CAP Capital Asset Management System (CAMS)
  - ▶ Conduct the FCAs
  - ▶ Allow for Reporting and Visualization
  - ▶ Build Out Annual Renewal Plans
  - ▶ Keep the Data Up-to-Date as work is completed

Cap 



## Ask Dave and Bill Anything

