2018 Energy Service Coalition Conference
Atlanta, GA

How to Communicate Your Message of Value to the Higher Education Market

Colin M. Coyne, Ed.D., M.M.
Chief Strategy Officer, Samford University

Lens 1 – Understand Who You're Dealing With

Samford University

Samford University

2016 Campus Infrastructure Improvement

Through Environmental and Financial Stewardship

Our campus will be better for it

SAMFORD UNIVERSITY

Lens 2 – Appreciate the Context of our Need

Samford University

The Challenge

Riding the Slippery Slope of Deferred Maintenance

Samford University

The Slippery Slope of Funding Facilities and Grounds

	CAMPUS MASTER PLAN			OPERATING CASH FLOW	
	New Construction	Renovation	Deferred Maintenance	Normal Replacement / Preventative Maintenance	Operations
	$x	*$0.5x*	*$0.1Σ(x+.5x)*	*$.05Σ(x+.5x)*	*$y*
Buildings					
Systems					
Hardscape					
Infrastructure					

Ease of Funding

	Appealing to donors; regularly funded by operating cash flows; financeable
	Less appealing to donors; last dollar funded from operating cash flows
	Special funding required; "non essential" until essential; usually unfunded capital items
	Unfunded by donors; capital investment required; triage funding mentality

What is Spent	Facilities Funding = y +Σ (x+.5x)(finanicng cost)	y + **.045**(Σ (x+.5x))
Should be Spent	Facilities Funding = y + **.05(Σ(x+.5x))** +Σ (x+.5x)(financing cost)	y +. **095**(Σ (x+.5x)
Needs to be Spent	Facilities Funding = y + **.05(Σ(x+.5x)) + $.1Σ(x+.5x)** +Σ (x+.5x)(financing cost)	y + **.195** (Σ (x+.5x)

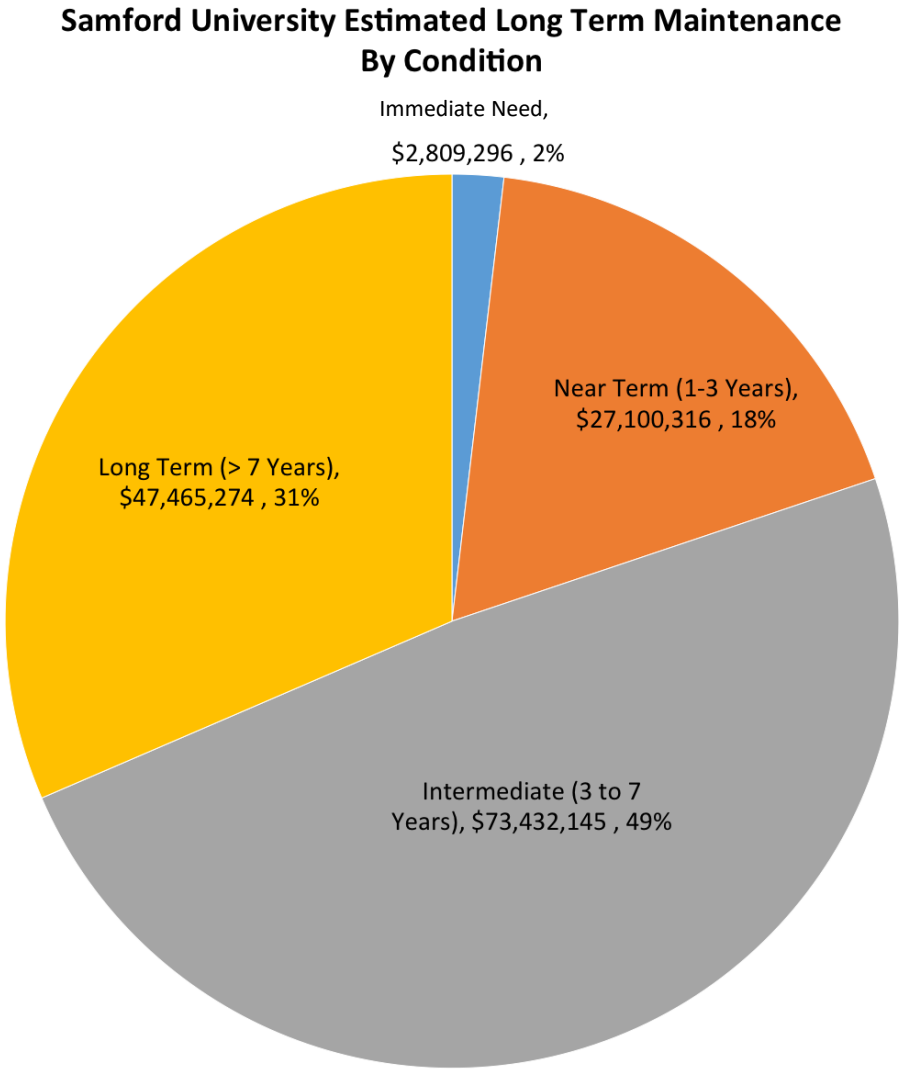
The Challenge

The Campus We Love needs some Love

- 60 years on Lakeshore Campus
- Aging Facilities
- Inefficient Equipment
- Failing Systems
- Competing Capital Investments
- Cash Flow Management
- Maintaining consistency with Values and Mission
- Adhering to our Strategic Plan

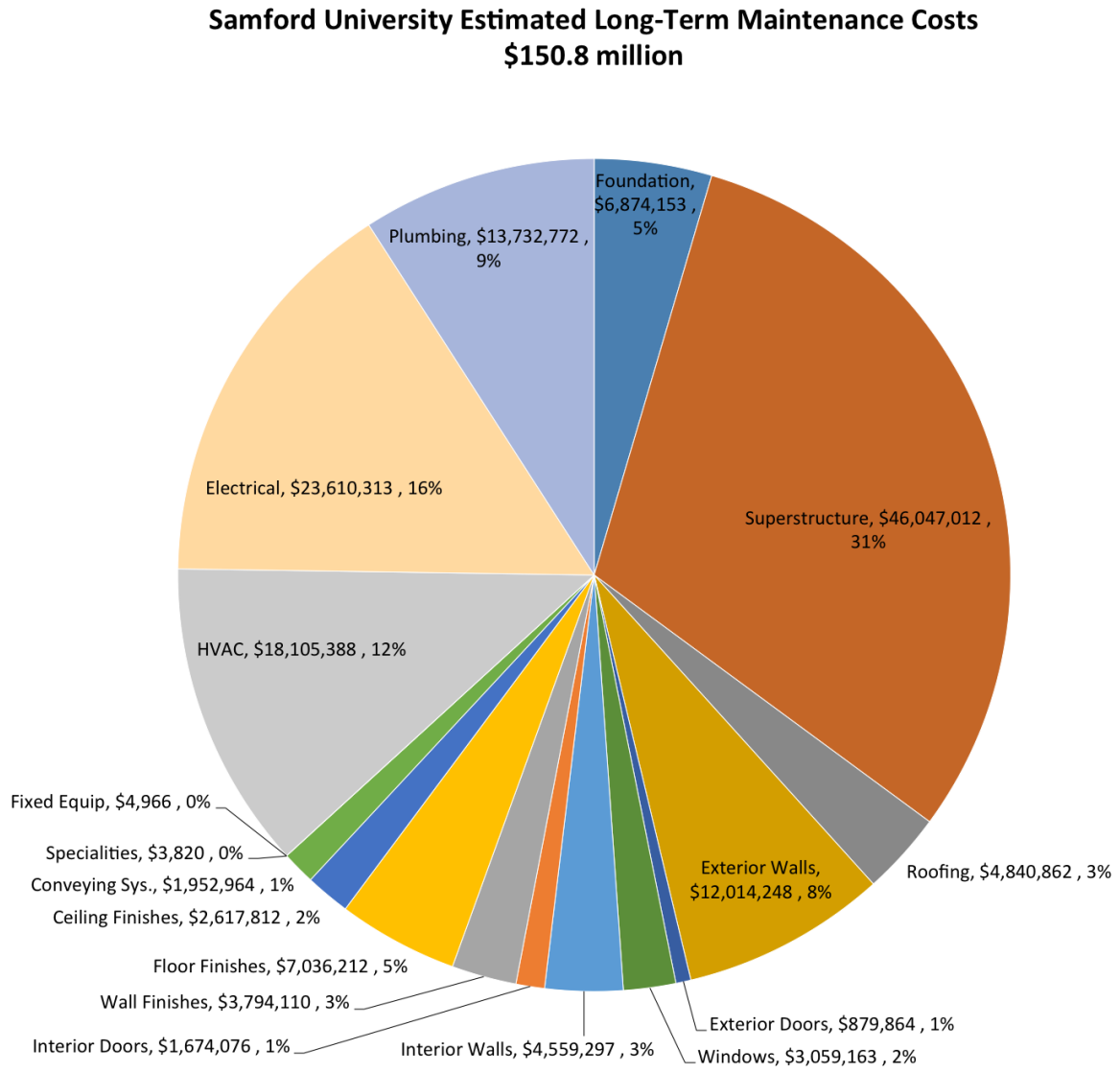
The Challenge

Campus Master Planning: Respecting the Past, Embracing the Future



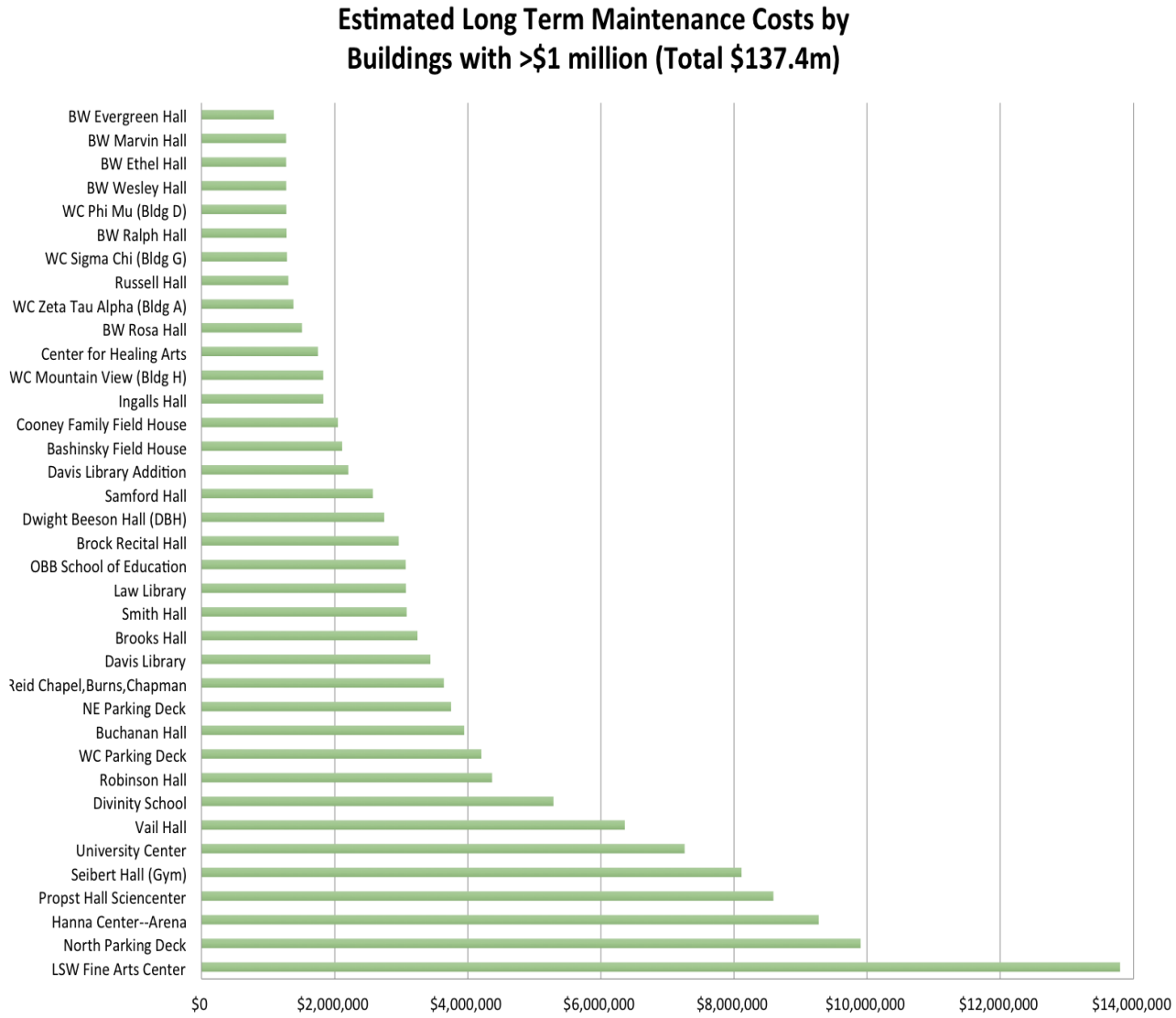
The Challenge

Campus Master Planning: Respecting the Past, Embracing the Future



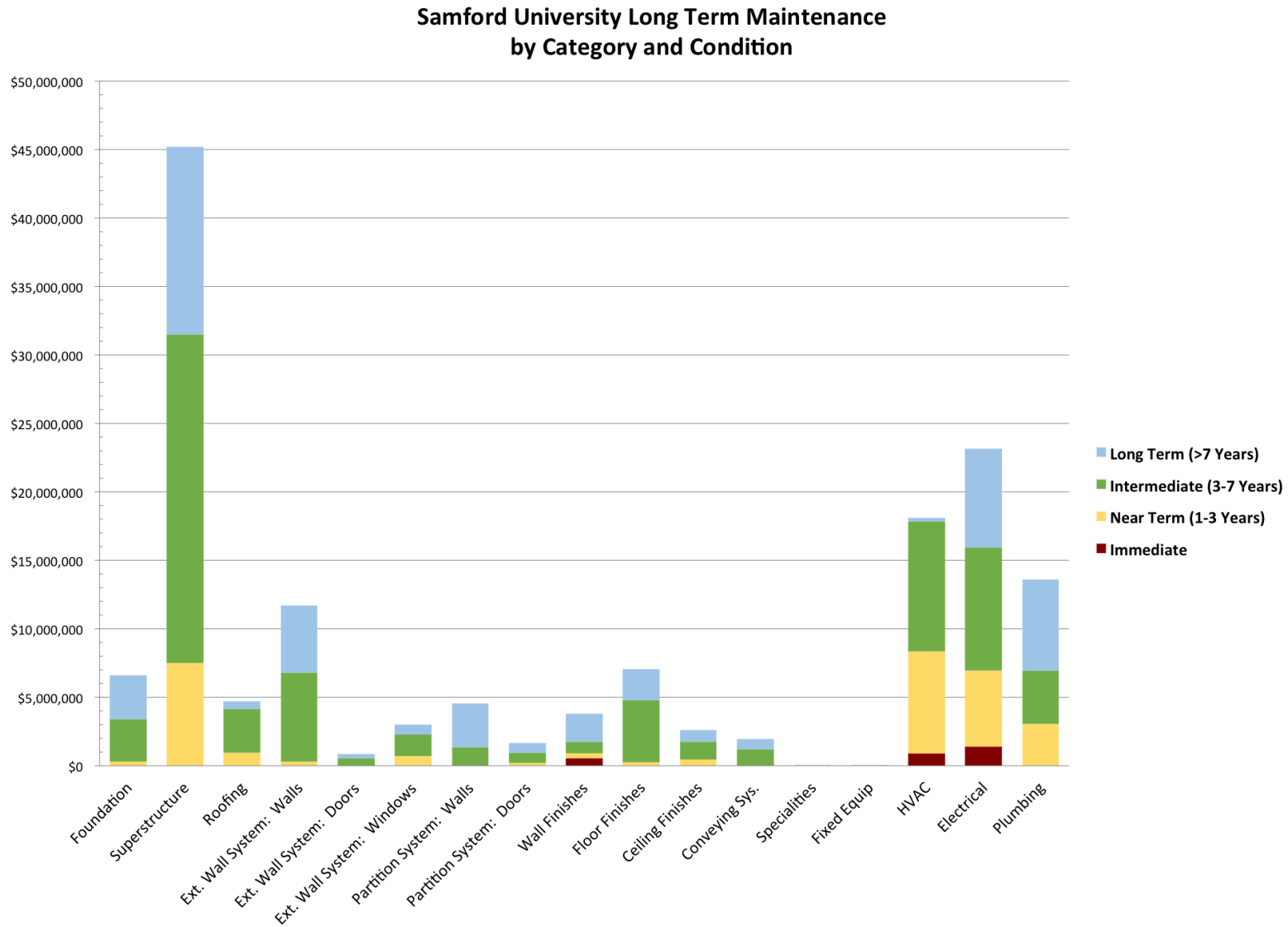
The Challenge

Campus Master Planning: A Need for Granularity



The Challenge

Chunking: Tasty Bite-sized Morsels



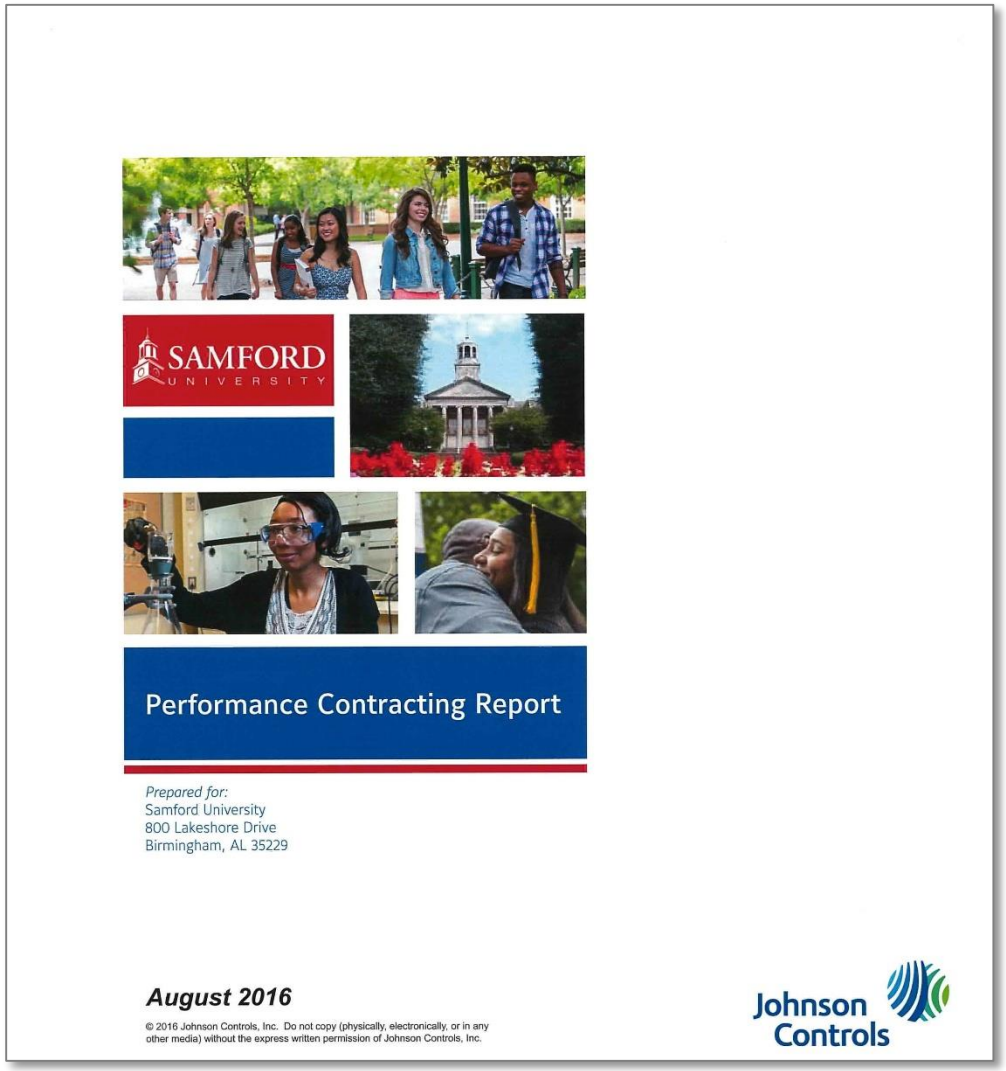
Lens 3 – Put it Where the Goats Can Get It

Samford University

Execution or Executed?
Having the Right CPPC Partner

- Successful Three Year Relationship
- Fortune 100 firm (*Fiscal 2015 Revenues = $37.2 billion*)
- 1,300 locations
- 8,565 projects
- 137,145 employees
- 1,887 higher education partners
- Deep experience with ESPC's
- Values alignment
- $287,000 Performance Audit

Performance Contracting Report:
An exhaustive audit that establishes priorities *by ROI*



Energy Conservation Measures (ECM)

ECM 1 - Lighting Upgrades

ECM 2 - Domestic Water Conservation

ECM 3 - Building Envelope

ECM 4 - Window Replacements

ECM 5 - Piping Insulation

ECM 6 - Metasys® Upgrades

ECM 7 - Controls and Mechanical Improvements

ECM 8 - Chilled Water Plant Modernization

ECM 9 - Natural Gas Rate Change

ECM 10 - Heating Venting Air Conditioning (HVAC) Improvements

ECM 13 - Electrical Improvements

ECM 14 - Miscellaneous Mechanical Improvements

ECM 15 - Domestic Hot Water Equipment Upgrades

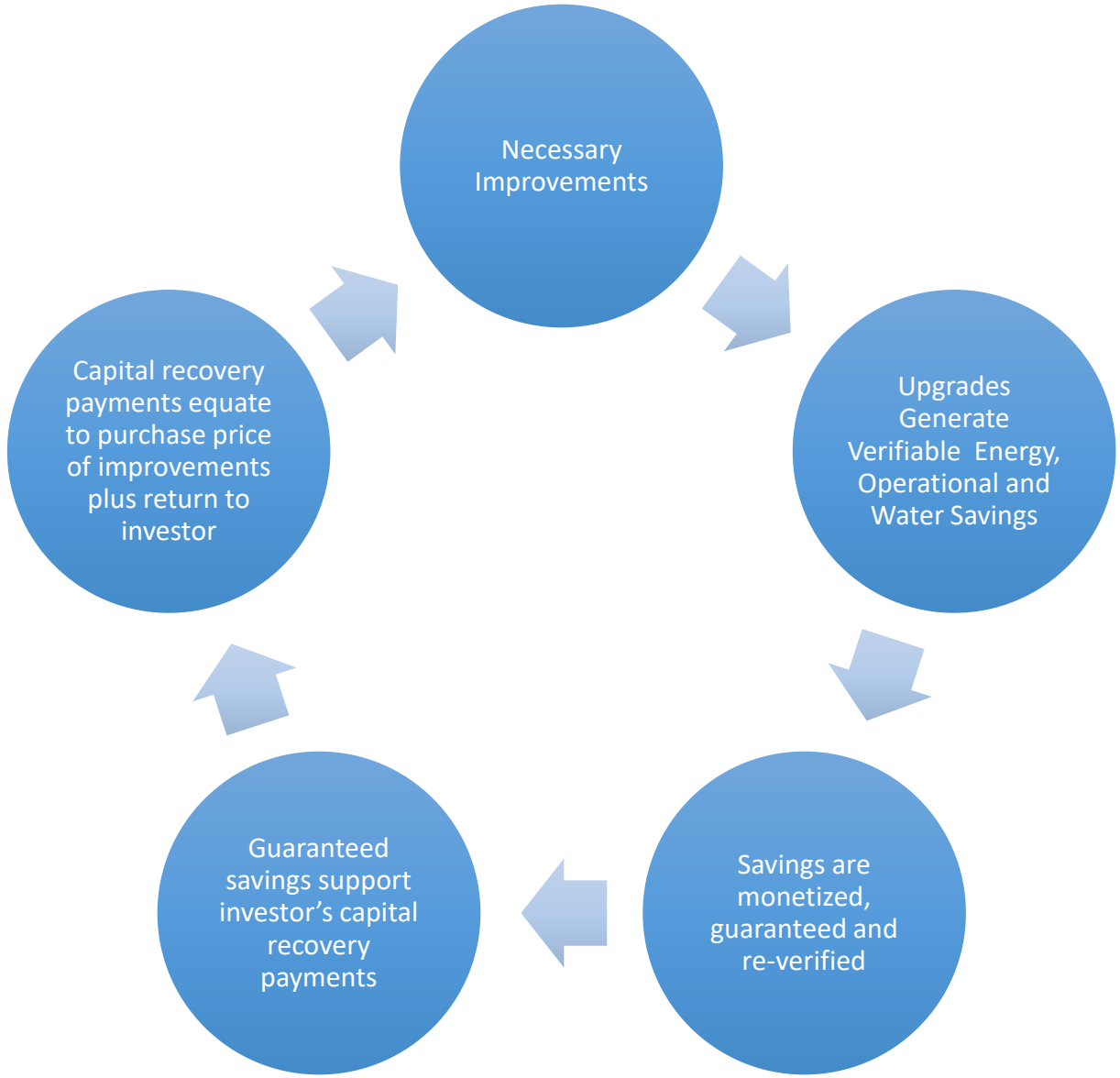
ECM 16 - Hot Water System Improvements

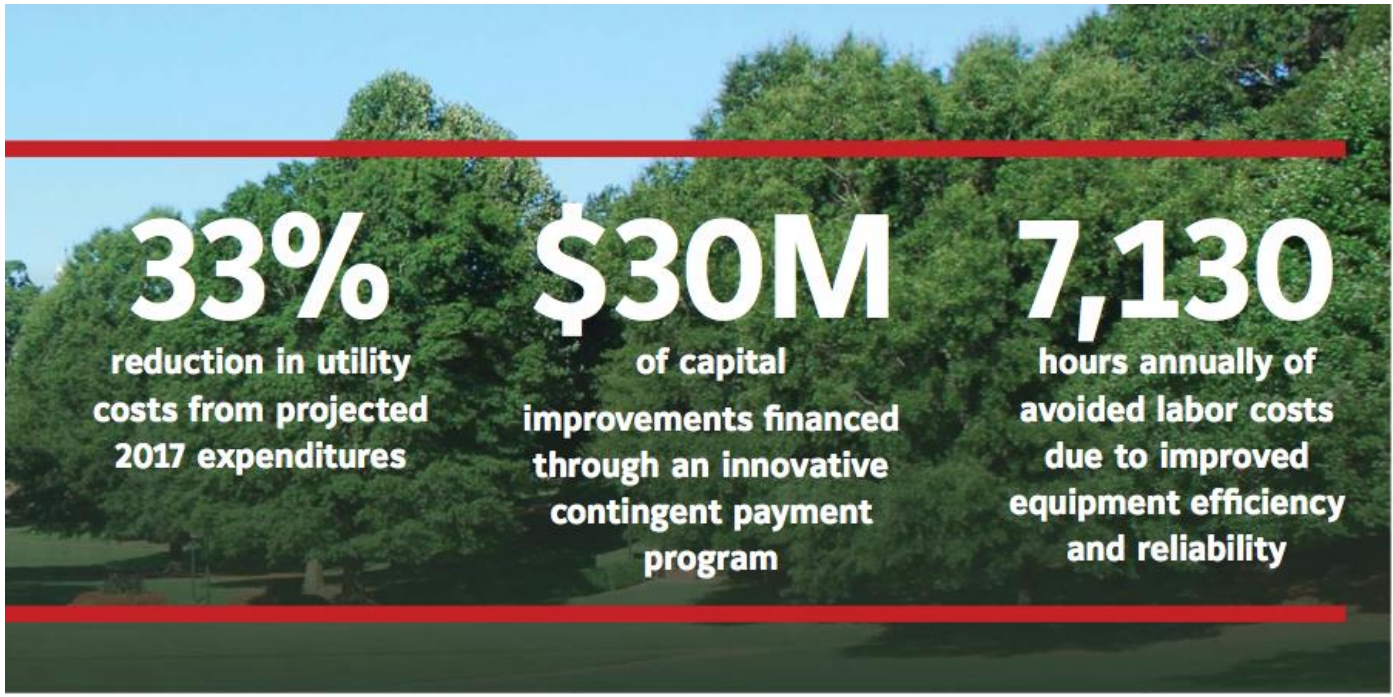
The Solution:

Contingent Payment Performance Contract ("CPPC")

- Replace failing systems; address inefficiencies
- Improvements lead to reduced operating costs (energy, water, labor)
- Savings are sufficient to pay for improvements within a 20 year period
- CPPC provider finances cost of improvements
- CPPC provider is repaid only if and as savings are realized
- Net result: no cash investment by Samford; cash flow neutral; long-term operating discipline is assured; benefits inure to Samford
- Samford has received exclusion from debt covenants for CPPC; if financed conventionally, would stress covenant restrictions

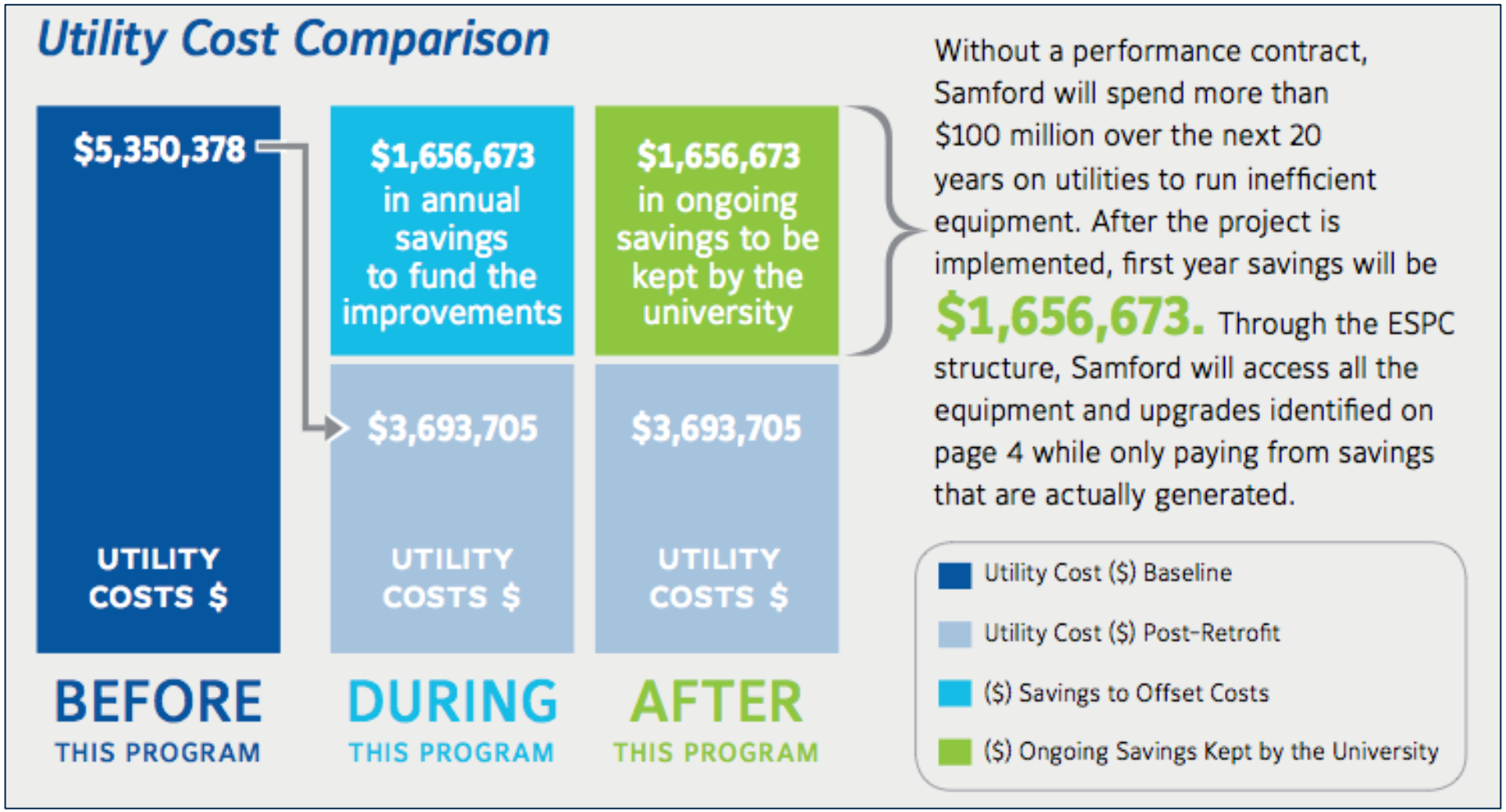
Structuring the Transaction:
Need Driven, Independent Verification





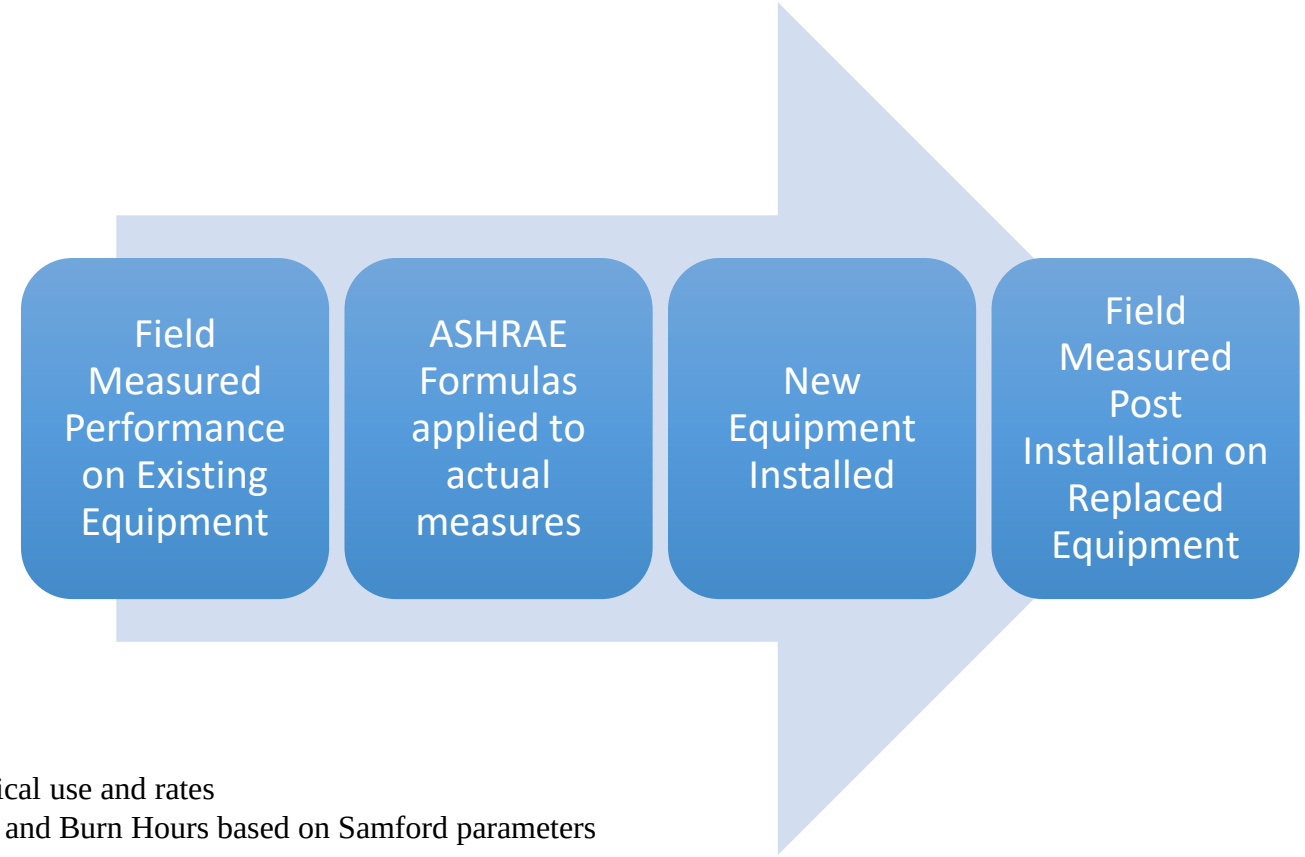
Redirected Energy Costs

We are spending the money either way



Structuring the Operational Transaction:

Legitimizing Energy, Water and Operational Savings: VERIFICATION

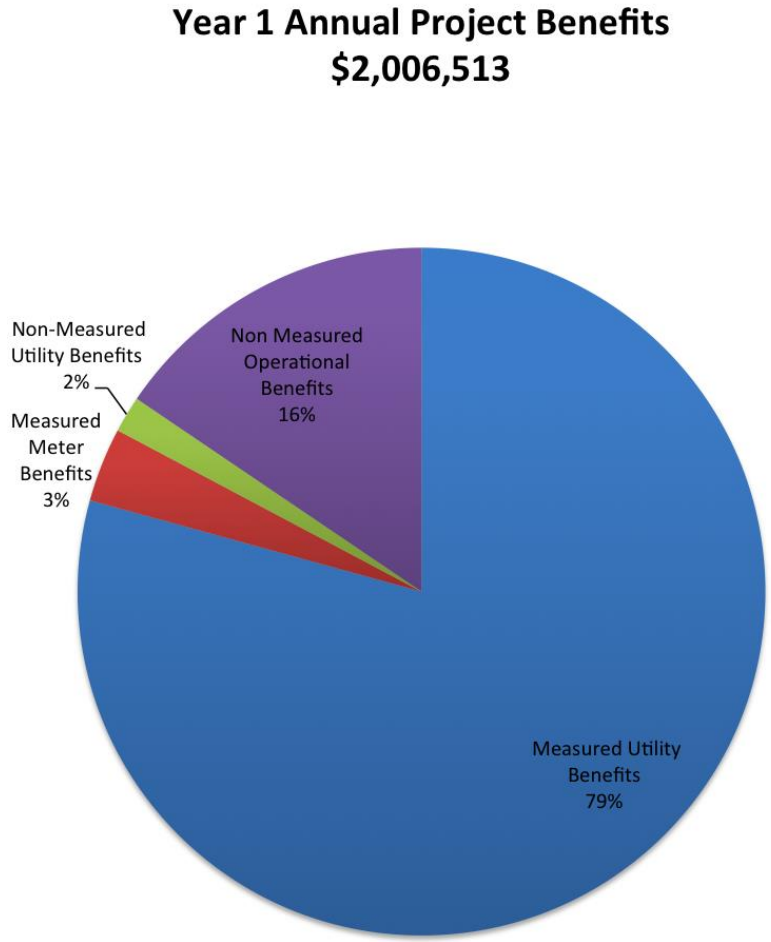


3 year historical use and rates
Temperature and Burn Hours based on Samford parameters

Structuring the Operational Transaction:

Legitimizing Energy, Water and Operational Savings: VERIFICATION

Performance Year	Utility Benefits	Meter Benefits	Utility Benefits	Operational Benefits	Annual Project Benefits
	MPB	MPB	NMPB	NMPB	MPB & NMPB
1	$1,590,769.65	$69,878.83	$34,430.22	$311,434.92	$2,006,513.62
2	$1,635,278.35	$71,975.19	$35,463.12	$320,777.97	$2,063,494.64
3	$1,681,058.03	$74,134.45	$36,527.02	$330,401.31	$2,122,120.80
4	$1,728,145.52	$76,358.48	$37,622.83	$340,313.35	$2,182,440.17
5	$1,776,578.75	$78,649.24	$38,751.51	$350,522.75	$2,244,502.24



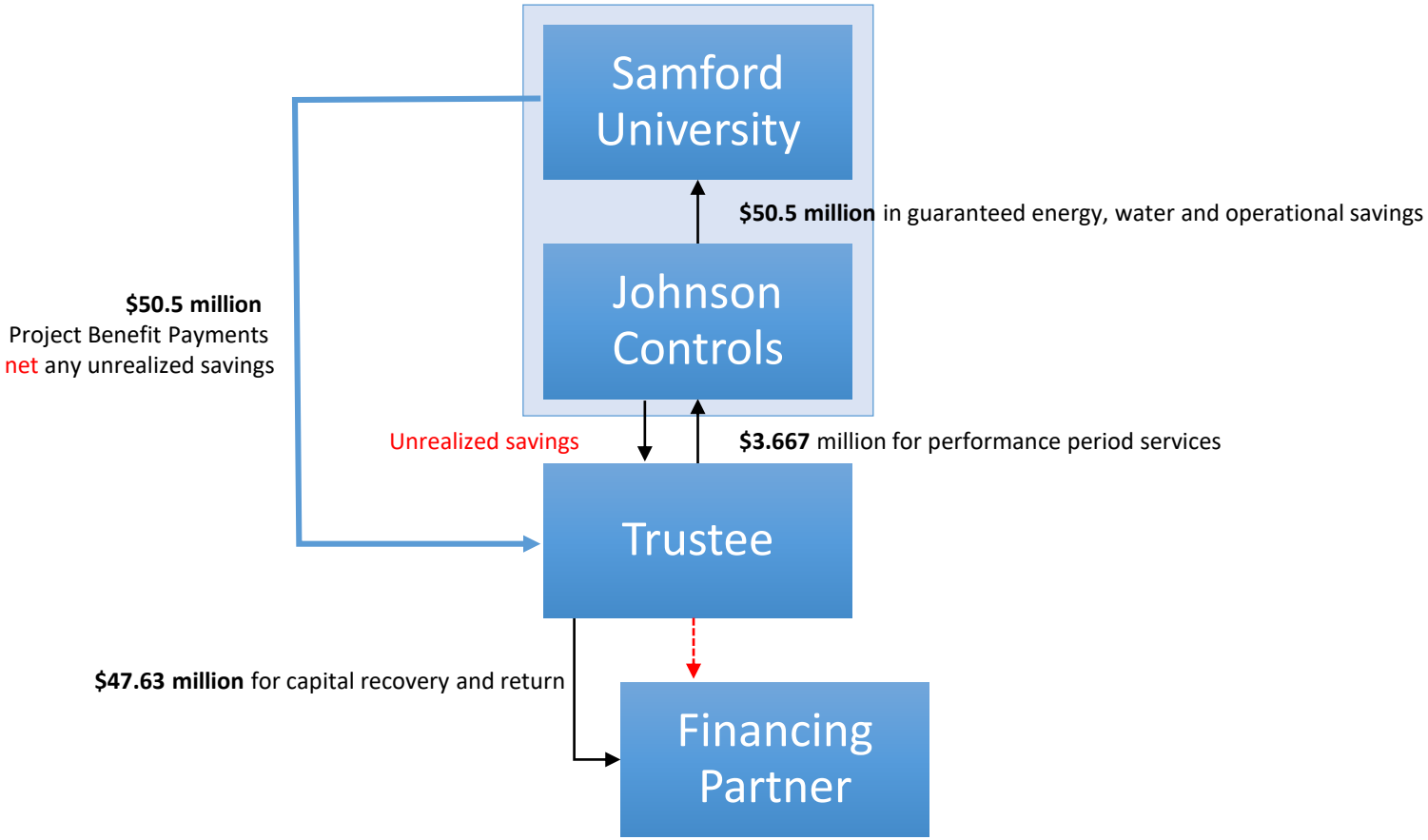
Structuring the Operational Transaction:

Legitimizing Energy, Water and Operational Savings: VERIFICATION

Non-Measured Utility Benefits	ECM	Year 1 Benefits	Escalation
The Non-Measured Project Benefits of ECM 2C and 2D are a result of irrigation water savings replaced with well water the sustainable flow rate of which could not be pre-established.	2C, 2D	$29,522	3%
The Non-Measured Project Benefits of 10A are a result of a minor energy savings associated with and efficiency improvement associated with the scope for work.	10A	$4,908	3%
Total Non-Measured Utility Benefits =		$34,430	

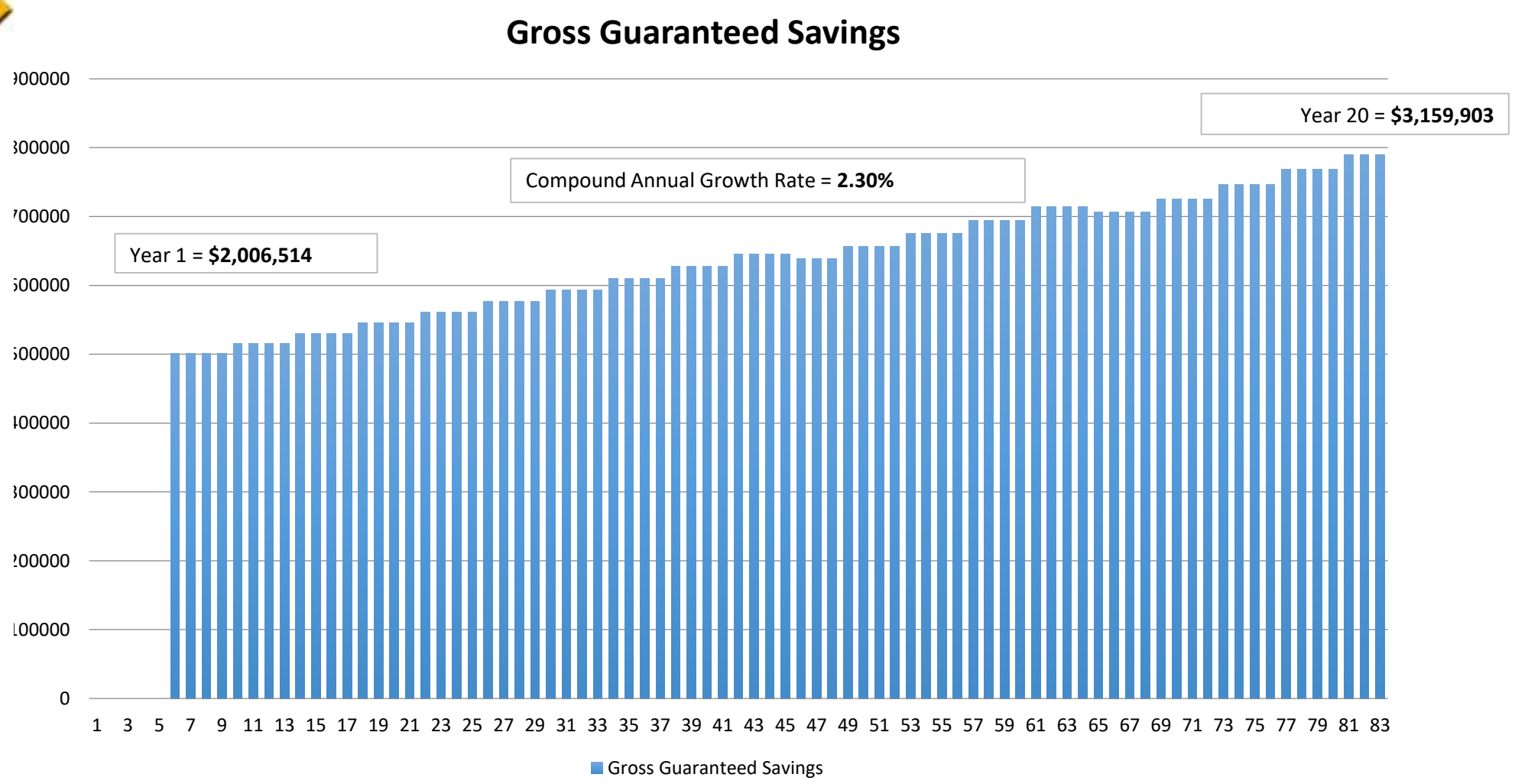
Non-Measured Operational Benefits	ECM	Year 1 Benefits	Escalation
The Non-Measured Project Benefits of ECM 1A, 1B and 1E are a result of material savings associated with the warranty covering replacement materials.	1A, 1B, 1E	$47,299	3%
The Non-Measured Project Benefits of ECM 2 are a result of material savings associated new materials and attic stock provided.	2	$3,646	3%
The Non-Measured Project Benefits of ECM 4 are a result of avoided contract costs associated with repainting existing wood windows	4	$161,358	3%
The Non-Measured Project Benefits of ECM 8 are a result of avoided service costs associated with the extended warranty covering the new chillers and chiller drives	8	$24,972	3%
The Non-Measured Project Benefits of ECM 10A are a result of avoided service costs associated rental spot cooling units.	10	$74,160	3%
Total Non-Measured Operational Benefits =		$311,435	

Structuring the Financial Transaction:
Cash Flow and Participants

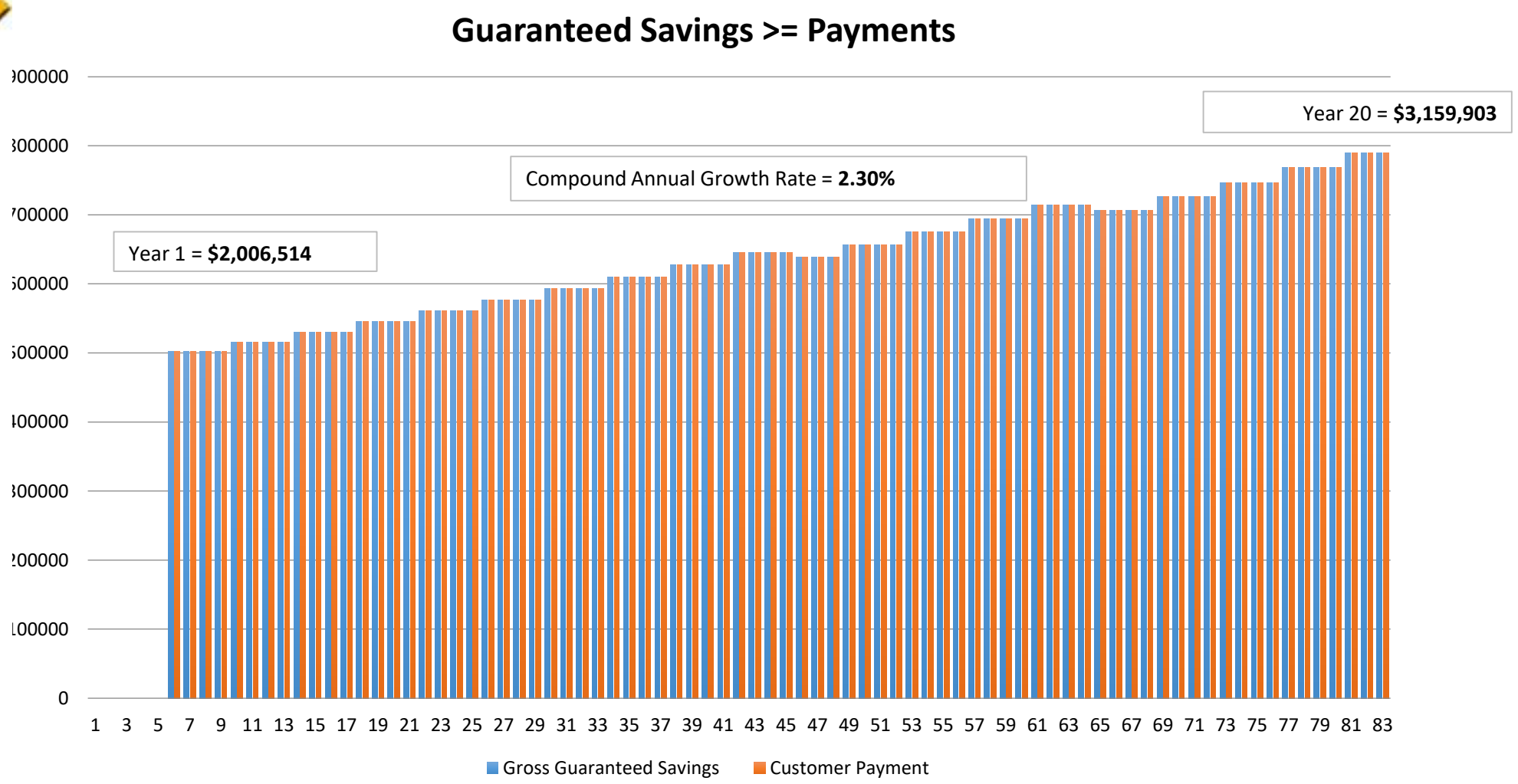


Project Benefit Payments are fixed in advanced, paid quarterly, and adjust annually pursuant to Schedule 2-1.

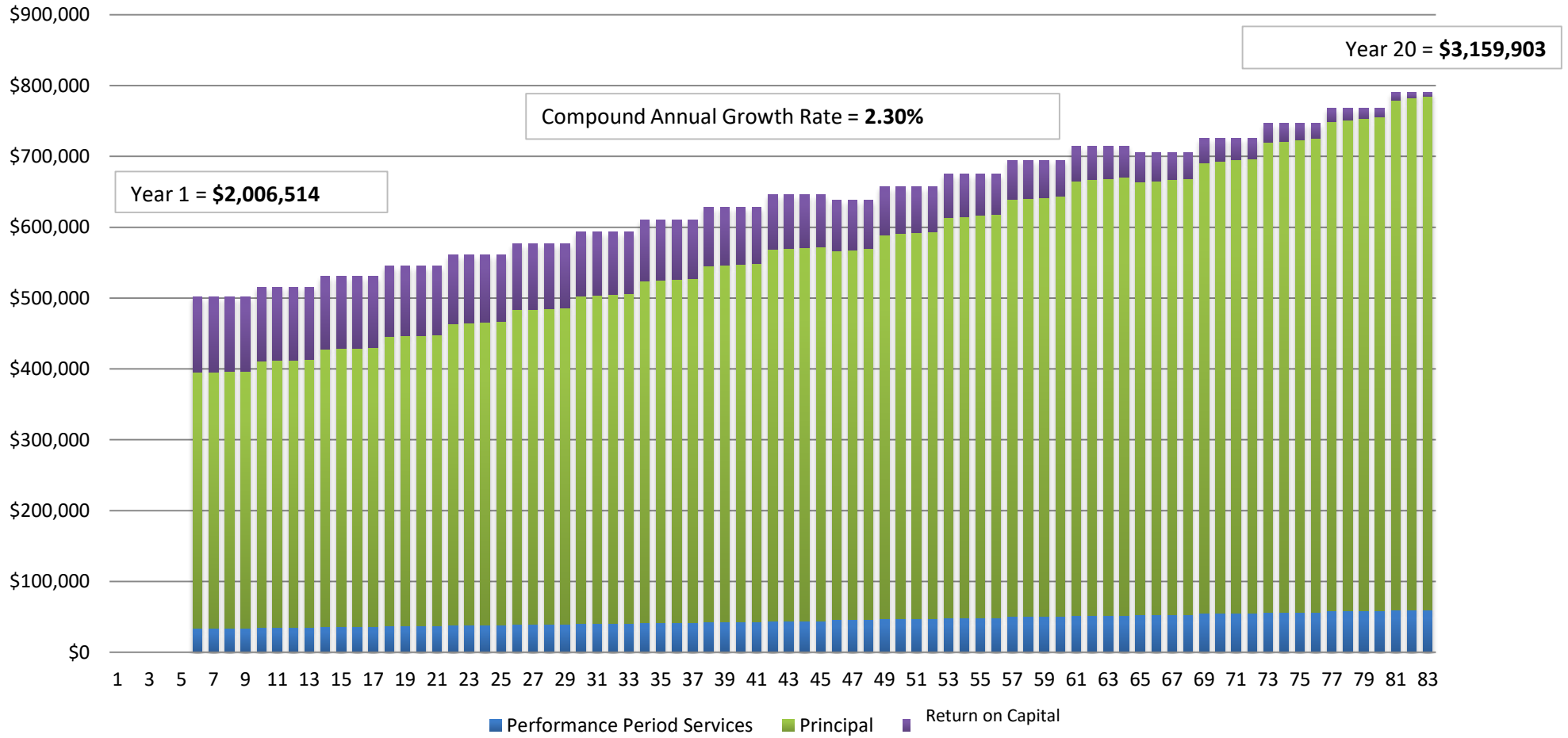
Structuring the Financial Transaction:
Charting Guaranteed Savings



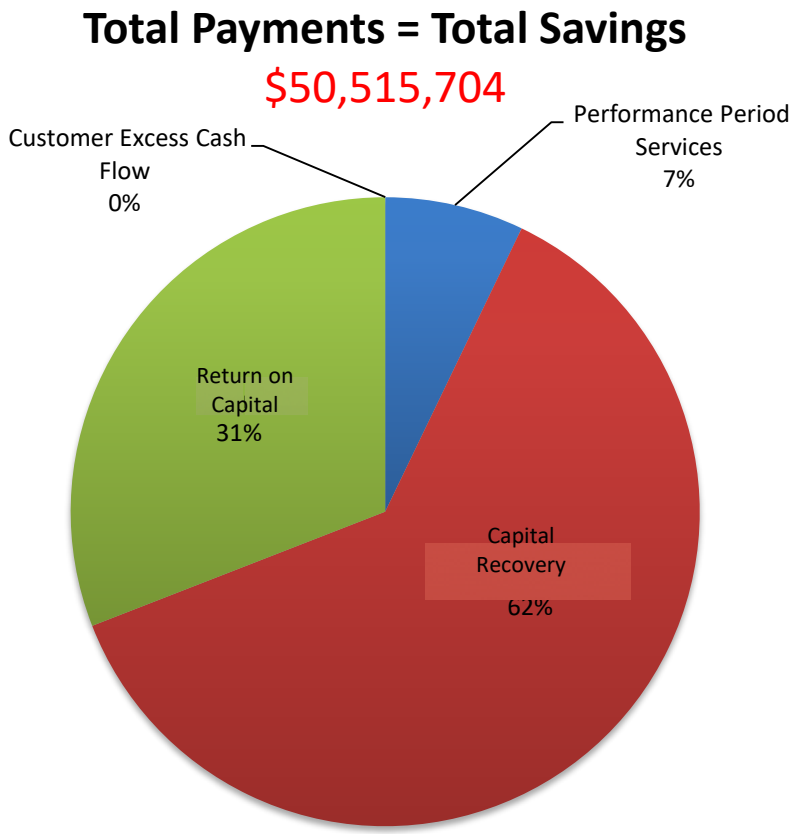
Structuring the Financial Transaction:
Guaranteed Savings Support Annual Debt Service Payments

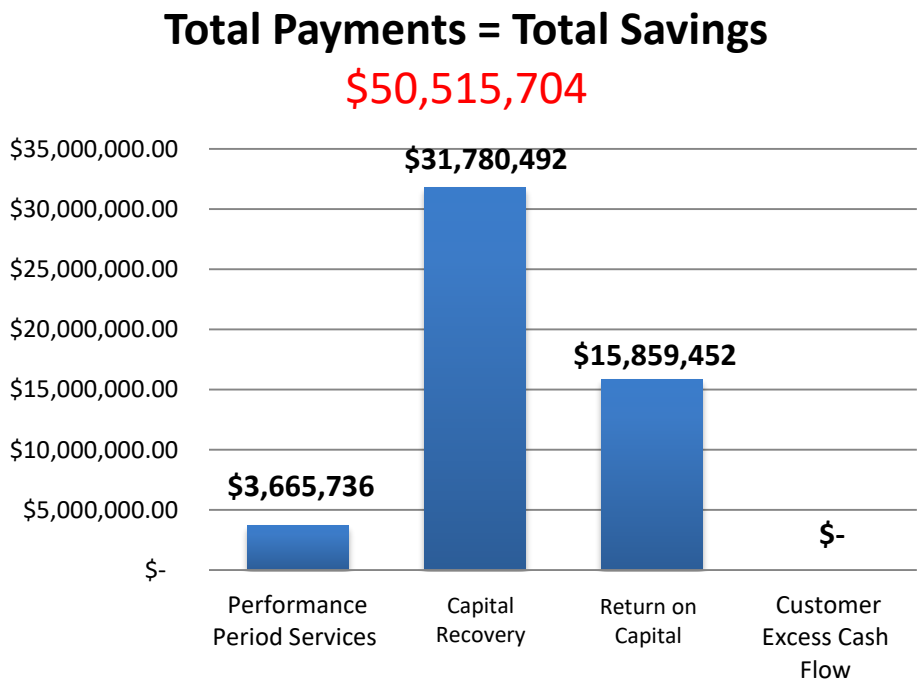


Structuring the Financial Transaction:
Reconciling Payment Breakdown to Implied Cost of Capital

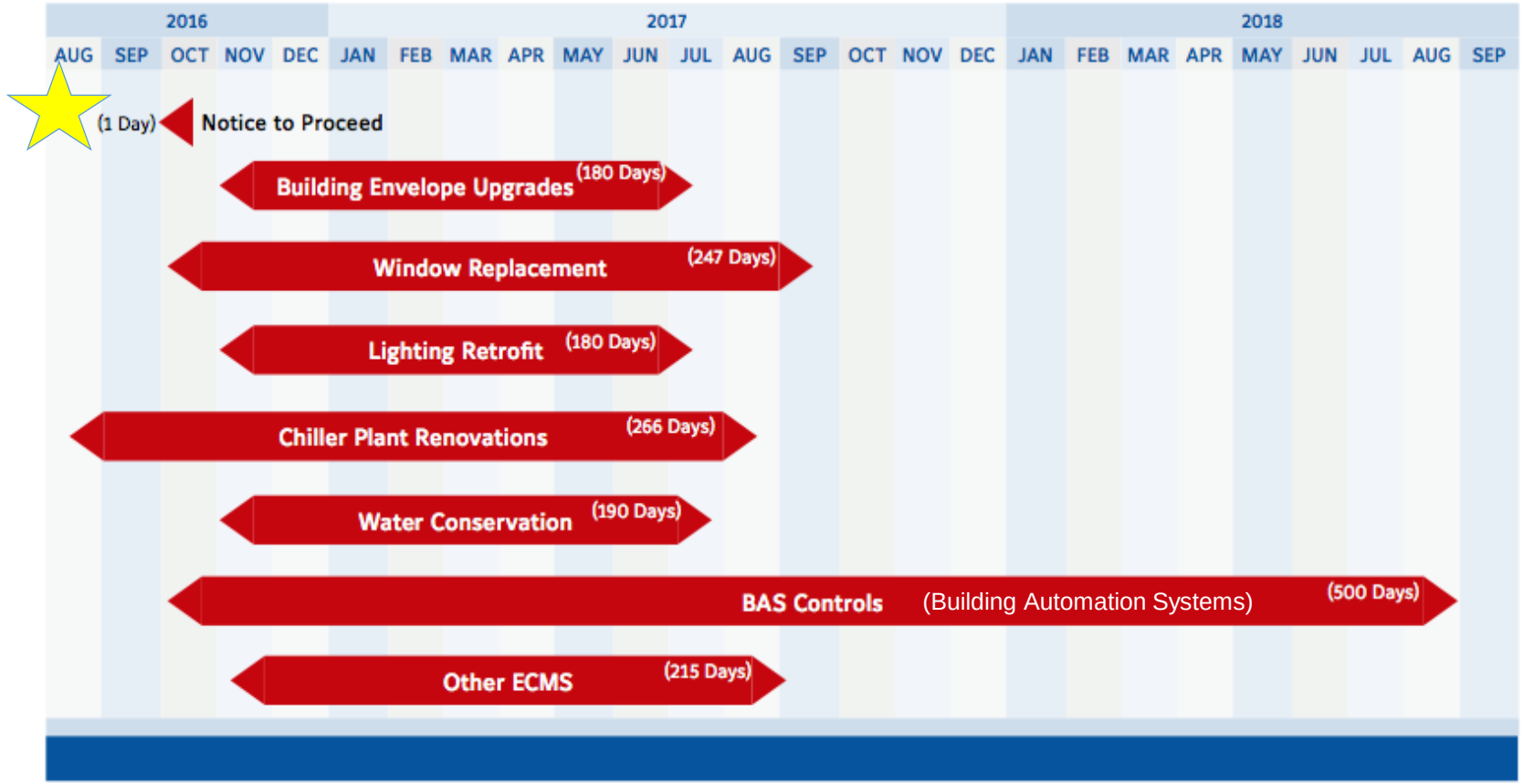


Structuring the Financial Transaction:
Payments to Savings Reconciliation



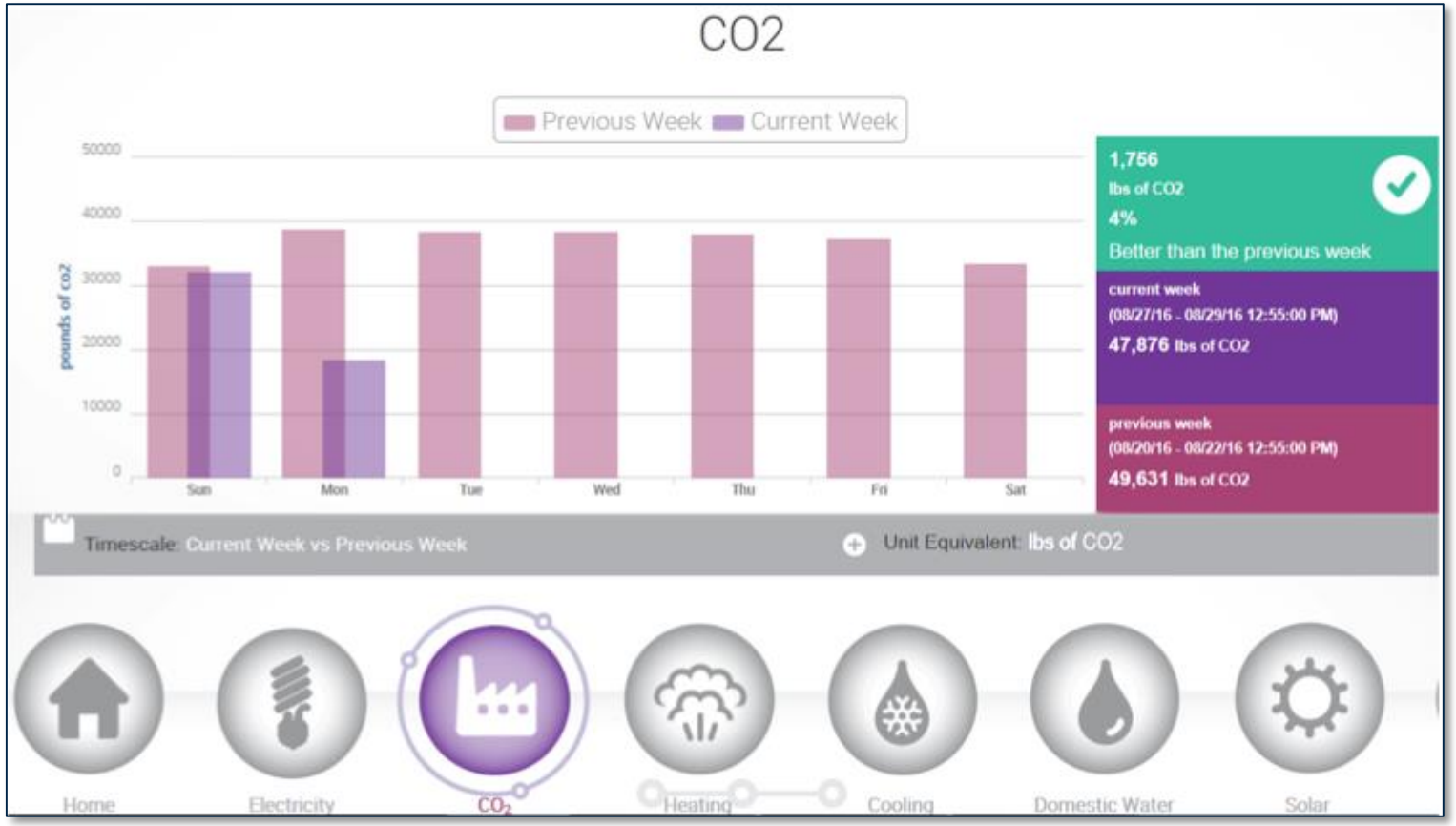


Turning Plans to Reality:
Implementation Timeline



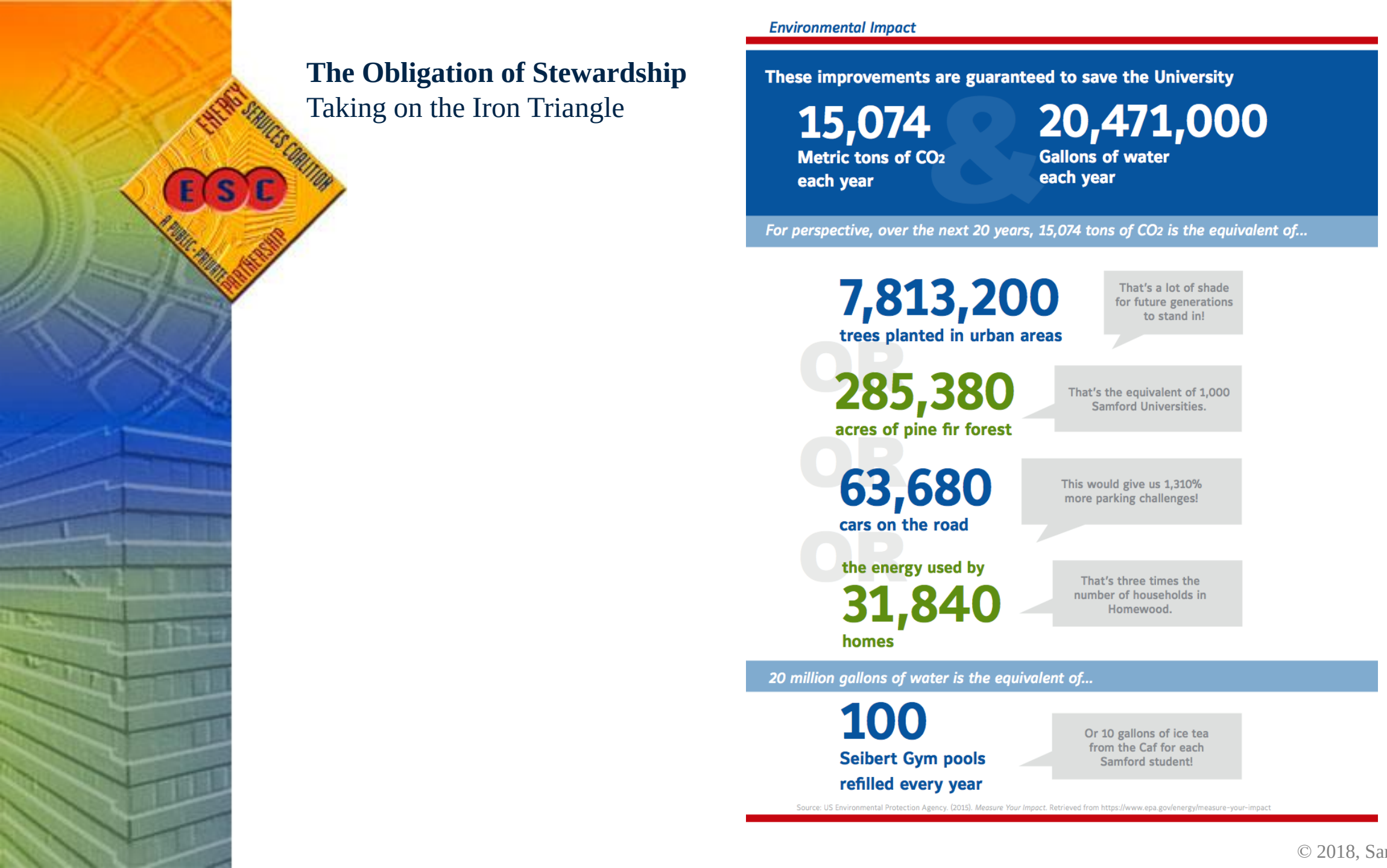
Internal Branding:

Increased Savings through Feedback – Process Improvements, Perceptual Gain



The Obligation of Stewardship

Taking on the Iron Triangle



The Challenge

Riding the Slippery Slope of Deferred Maintenance

Samford University

The Slippery Slope of Funding Facilities and Grounds

	CAMPUS MASTER PLAN			OPERATING CASH FLOW	
	New Construction	Renovation	Deferred Maintenance	Normal Replacement / Preventative Maintenance	Operations
	$x	*$0.5x*	*$0.1Σ(x+.5x)*	*$.05Σ(x+.5x)*	*$y*
Buildings					
Systems			Johnson Controls Contingent Payment Performance Contract	Johnson Controls Contingent Payment Performance Contract	
Hardscape					
Infrastructure		Johnson Controls Contingent Payment Performance Contract	Johnson Controls Contingent Payment Performance Contract	Johnson Controls Contingent Payment Performance Contract	

Ease of Funding

- Appealing to donors; regularly funded by operating cash flows; financeable
- Less appealing to donors; last dollar funded from operating cash flows
- Special funding required; "non essential" until essential; usually unfunded capital items
- Unfunded by donors; capital investment required; triage funding mentality

What is Spent	Facilities Funding = y +Σ (x+.5x)(finanicng cost)	y + **.045**(Σ (x+.5x))
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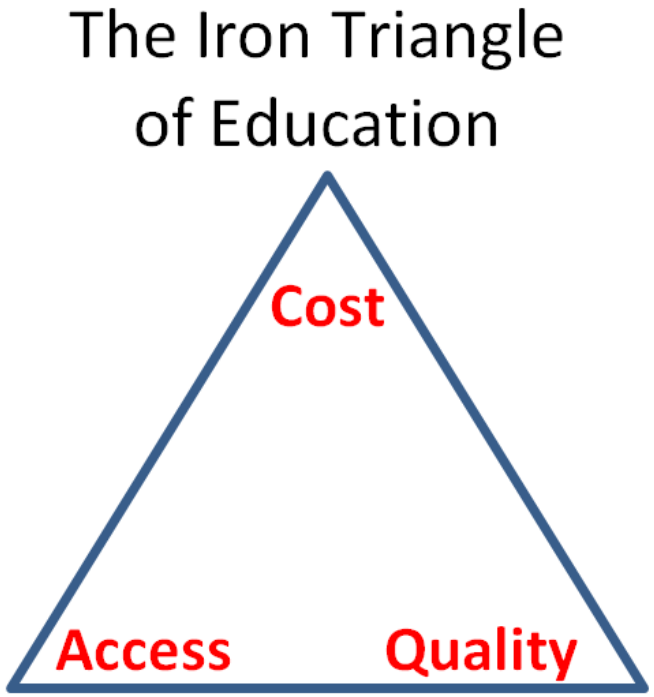
Needs to be Spent	Facilities Funding = y + **.05(Σ(x+.5x)) + $.1Σ(x+.5x)** +Σ (x+.5x)(financing cost)	y + **.195** (Σ (x+.5x)

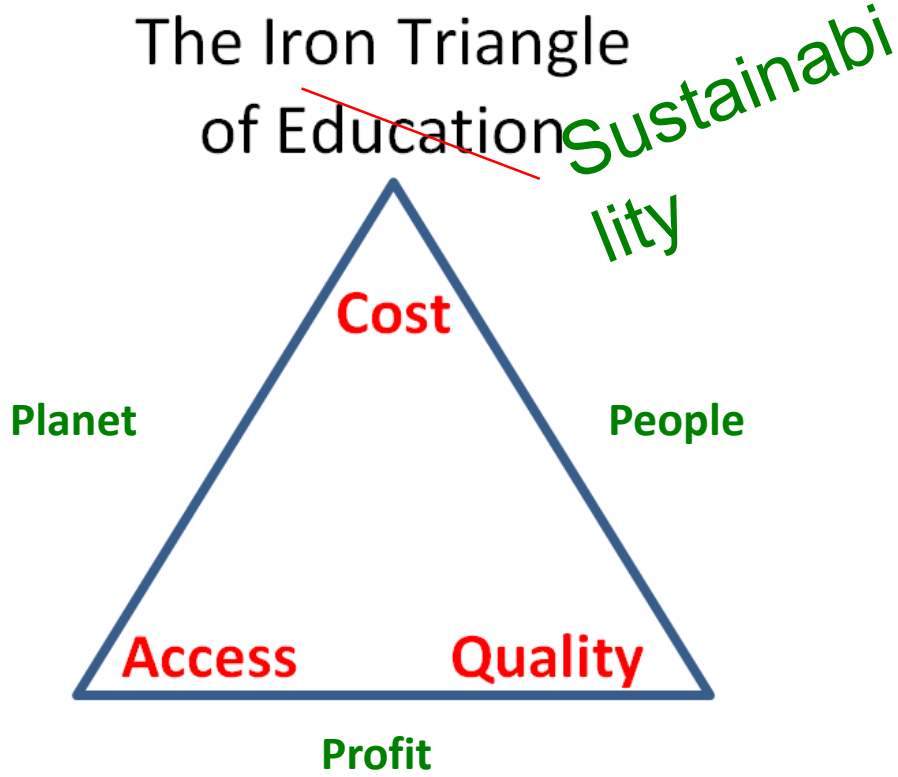
Lens 4 – Play the Long Game

Samford University

False Choices:
Breaking the Iron Triangle



False Choices:
Breaking the Iron Triangle



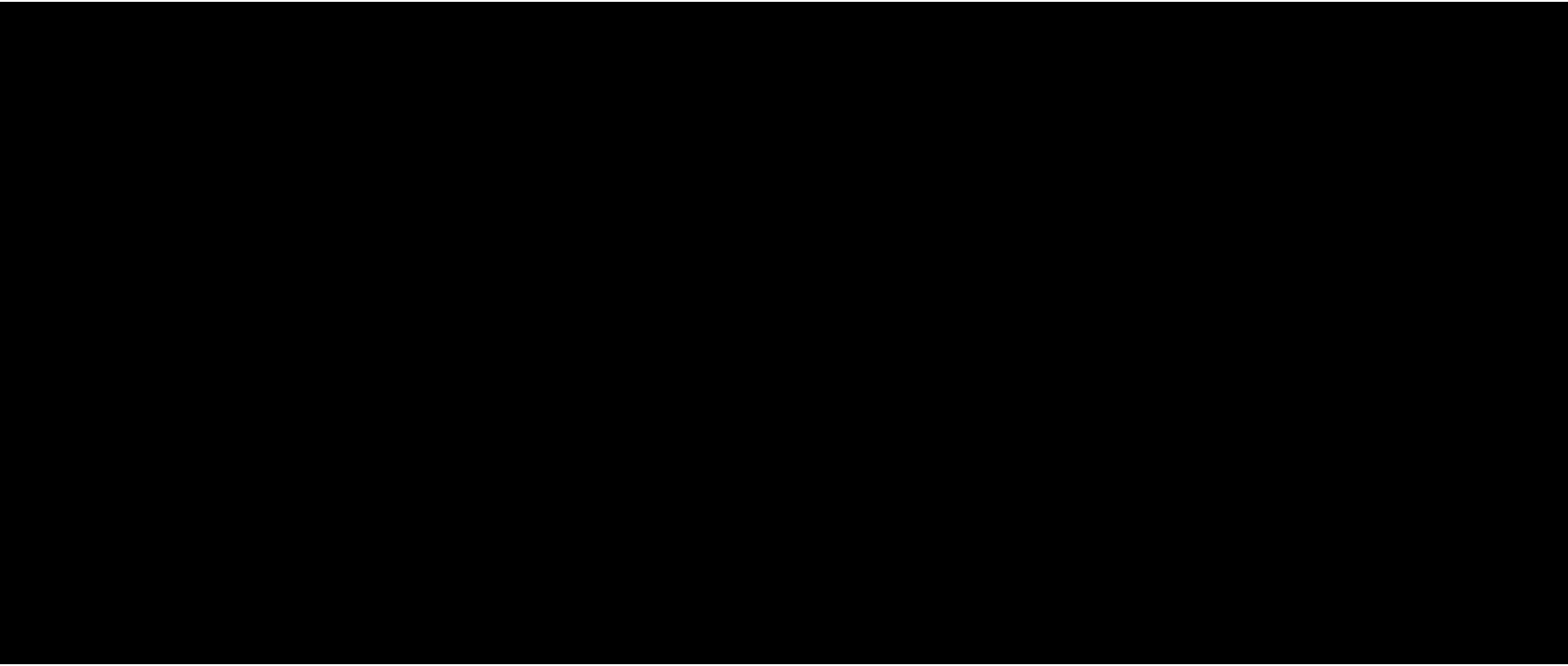
American Association of University Administrators

Donald A. Gatzke Outstanding Dissertation Award 2018

An Explanatory Model of First Year Retention:

Application and Adaptation of Braxton, Doyle, Hartley, Hirschy, Jones & McLendon's *Rethinking College Student Retention*

Colin M. Coyne, Ed.D., M.M.
Alexis J. Stokes, Ed.D., M.E.



Question 2:
Driving Retention

After **removing co-curricular** activities of any type, what factors most influence and/are most **predictive of first year to second year persistence**?

a) Specifically, what factors most **influence social integration**?

b) Specifically, what differences (if any) exist between **a Low Retention Institution and a High Retention Institution**?

Explaining the Gap:
A Colloquial Guide to Terminology

Variable Name	Description	Might Say…
Psychosocial Engagement	Self-reported estimates of how frequently during the course of the school year the student has engaged in activities outside of class	*Sign me up!*
Social Integration	Degree of student's integration into the campus social system	*"I love you man!"*
Communal Potential	Student's perception of the potential for community among peers on campus	*"We are family!"*
Institutional Integrity	Student's perception that the institution acts in a manner consistent with its stated values and espoused mission	*"Show me the money!"*
Commitment of the Institution to Student Welfare	Student's perception that the institution genuinely supports the well-being of students	*"You love me; you really love me!"*
Faith Engagement*	Extent to which student exhibits or engages in faith related activities	*"Lord, just get me through this and I'll never…"*
Diversity Climate*	Student perceptions of campus tolerance for diversity	*"You say tomAto, I say tomAHto."*
Faculty Engagement *	Influence of faculty interactions on student experience	*"Yes, Obi Wan."*

Driving Persistence:

Low Retention Institution vs. High Retention Institution

Variables	**Low** Retention Institution Standardized Coefficients	*Un-Standardized*	**High** Resolution Institution Standardized Coefficients	*Un-Standardized*
(Constant)		0.179		-0.348
High School GPA+	-0.032	-0.01	0.005	0.002
On-Campus Residence++	0.015	0.019	0.013	0.023
Inistinal Institutional Commitment++	-0.058	-0.039	-0.035	-0.027
Ability to Pay++	-0.015	-0.012	-0.004	-0.003
Psychosocial Engagement	0.184**	0.166	0.198***	0.224
Communal Potential	0.521***	0.507	0.543***	0.557
Institutional Integrity	0.056	0.044	0.147***	0.134
Commitment to Student Welfare	0.201*	0.18	-0.004	-0.004
Faculty Engagement	-0.007	-0.007	0.103**	0.127
Athletic Status				
Co-Curricular Participation				
Adjusted R-Squared	0.636***		0.604***	
N	183		550	

**p<0.05, **p<.01, ***p<.001*

++ Bivariate analysis on numaric variable indicates significant correlation with Social Integration at the .01 Level
+ Bivariate analysis on numeric variable indicates significant correlation with Social Integration at the .05 Level

Driving Persistence:
Social Integration Map

Low Retention Institution

		Athletes		Co-Curriculars			First Years	
	Institution	*Athletes*	*Non-Athletes*	*Participants*	*Non-Participants*	*Non-Athlete Non-Participants*	*First Year*	*Non First Year*
Primary Antecedents	Communal Potential	Communal Potential	Communal Potential	Communal Potential	Communal Potential	Communal Potential	Communal Potential	Communal Potential
	Commitment to Student Welfare	Psychosocial Engagement	Psychosocial Engagement	Psychosocial Engagement			Institutional Integrity	Psychsocial Engagement
	Psychosocial Engagement							Commitment to Student Welfare
Non-Redundant Secondary Antecedents	Institutional Integrity		Institutional Integrity	Commitment to Student Welfare	Psychosocial Engagement	NA	Psychosocial Engagement	Institutional Integrity
					Institutional Integrity	NA		

High Retention Institution

		Athletes		Co-Curriculars			First Years	
	Institution	*Athletes*	*Non-Athletes*	*Participants*	*Non-Participants*	*Non-Athlete Non-Participants*	*First Year*	*Non First Year*
Primary Antecedents	Communal Potential	Communal Potential	Communal Potential	Communal Potential	Communal Potential	Communal Potential	Communal Potential	Communal Potential
	Psychosocial Engagement	Athletic Experience	Psychosocial Engagement	Institutional Integrity	Psychosocial Engagement	Psychosocial Engagement		Psychsocial Engagement
	Institutional Integrity		Institutional Integrity	Psychosocial Engagement				Institutional Integrity
	Faculty Engagement		Faculty Engagement	Faculty Engagement				Faculty Engagement
Non-Redundant Secondary Antecedents	Commitment to Student Welfare	Psychosocial Engagement	Commitment to Student Welfare	Commitment to Student Welfare	Institutional Integrity	Institutional Integrity	Institutional Integrity	Commitment to Student Welfare
							Psychosocial Engagement	

Unpacking Institutional Integrity:
If it's the big driver, what drives it?

Variables	HRI Institutional Integrity: Standardized Coefficients	HRI Institutional Integrity: *Un-Standardized*
(Constant)		0.648
Gender	-0.084	-0.109
Race/Ethnicity	0.002	0.003
Parental Education Level	0.063	0.013
Parental Income	-0.018	-0.003
Average Grades in High School	0.023	0.01
On-Campus Residence	-0.02	-0.037
Initial Institutional Commitment	-0.068	-0.056
Ability to Pay	0.021	0.018
Psychosocial Engagement	-0.136**	-0.167
Social Integration	0.148**	0.162
Communal Potential	0.102**	0.112
Commitment of the Institution to Student Welfare	0.487***	0.491
Faith Engagement	0.062	0.045
Diversity Climate	-0.089*	-0.075
Faculty Engagement	0.072	0.095

Conceptual Framework for Study Questions

Braxton, et al. (2014): *Rethinking College Student Retention* revised by Coyne & Stokes

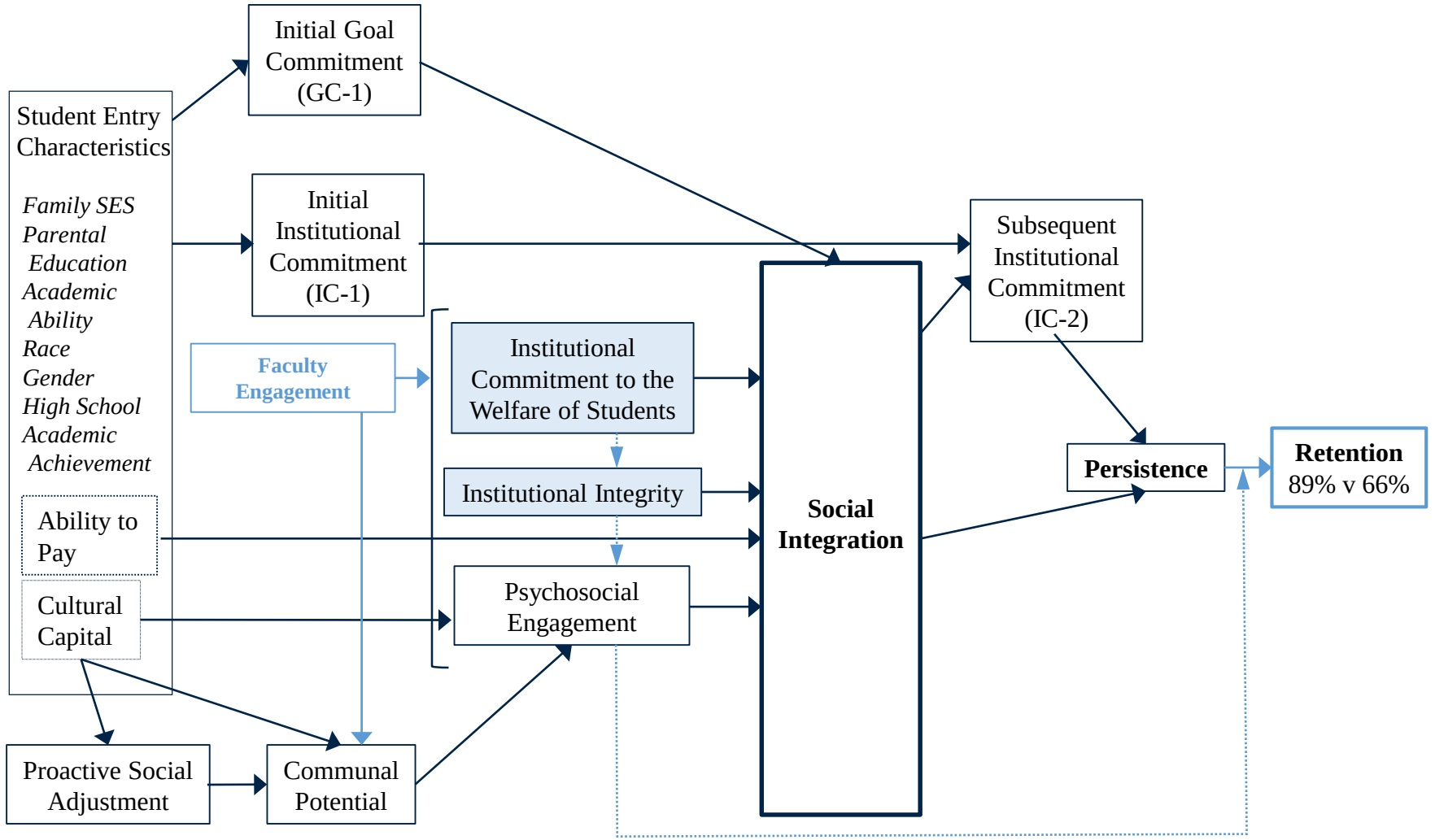


Figure 1: Toward a revision of the theory of student persistence in residential colleges and universities.

Lens 5 – Talk with me, not at me

Samford University

Results

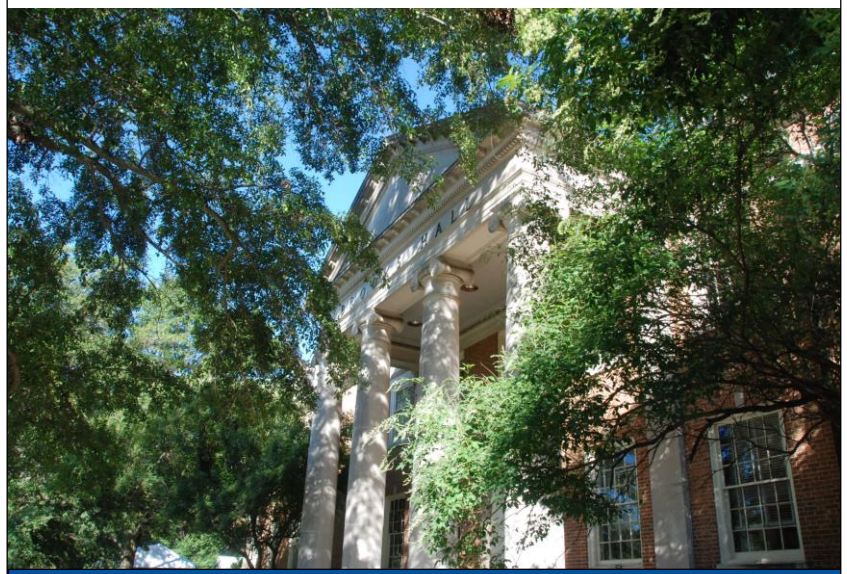
"It ain't bragging if you've done it."

FY- 17

Samford University Birmingham, Alabama

Construction Period M&V Report

January 1, 2017 through December 31, 2017



Johnson Controls

Results

"It ain't bragging if you've done it."