

Making Energy Simple for DeKalb County Schools

LED Lighting Survey

January 6, 2026

Today's Conversation



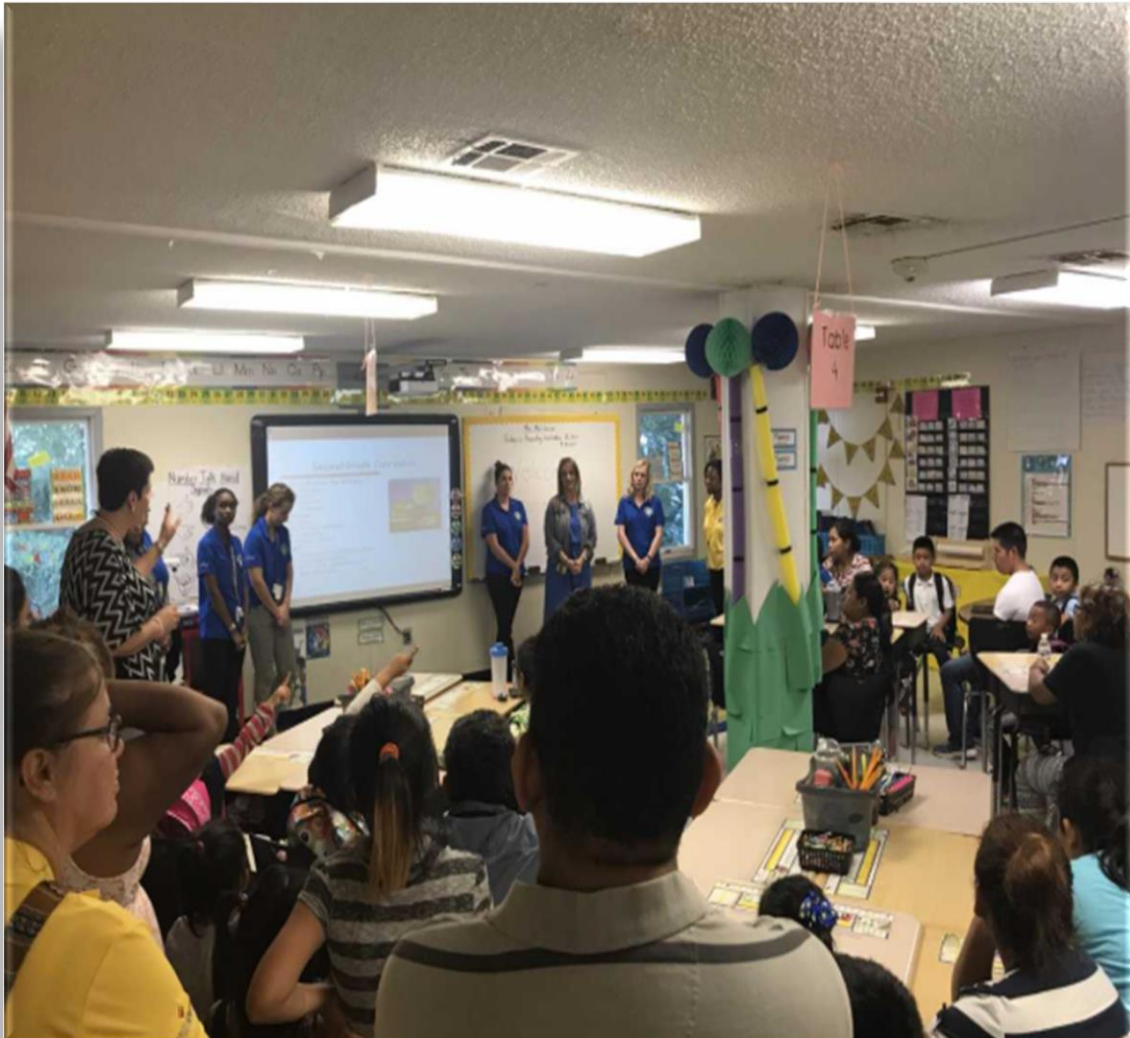
LED Lighting Survey Audit
Approach/Deliverable- Phase 1 (18
Schools)

Overview of Survey/Analysis of
DCS Lighting Phase 1

GPC Value Proposition/ Cash
Proforma

Our Path Forward

Lighting Survey Audit Approach & Deliverable



Detailed Audit :

- Number of fixtures by Room/Area Type/Building
- Action or Non-Action if existing LED; Convert to LED
- Provide Spec Sheets on each LED Solution
- Maintain DCS/IES Standards

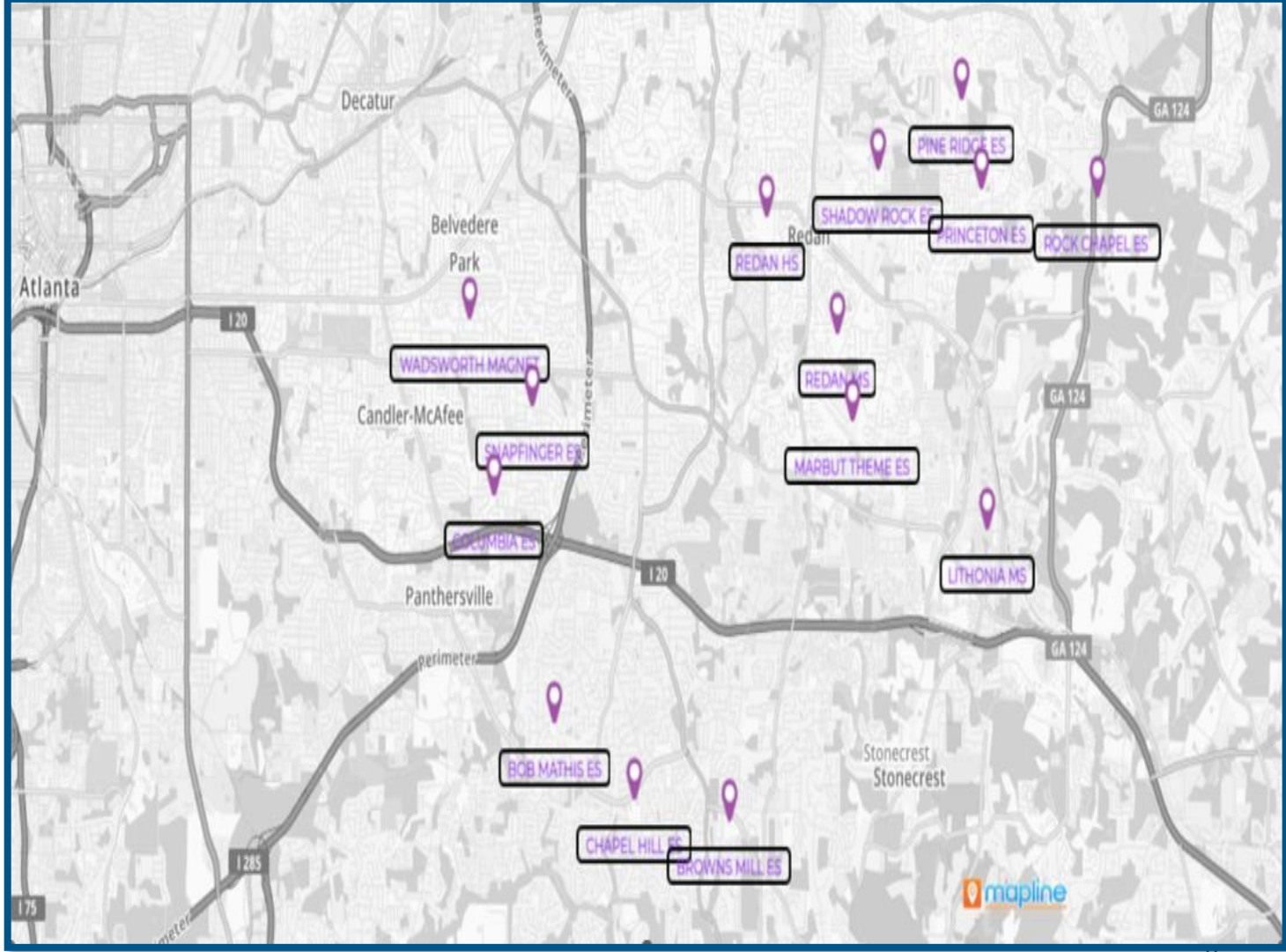
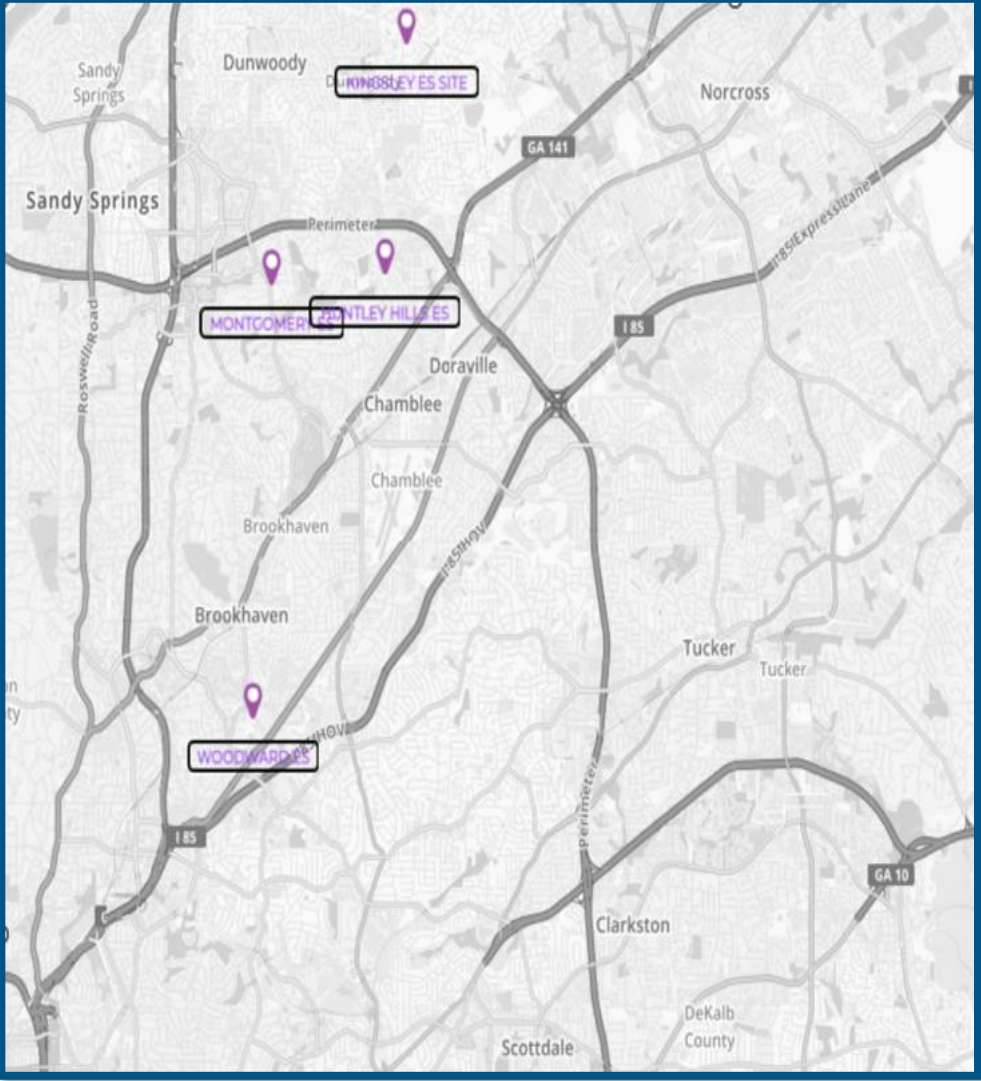
Analysis to include:

- Project Cost per Building for LED Conversion
- Energy and Operational Savings
- ROI/Simple Payback per Building
- Hours of Operation used per Building
- \$/kilowatt (kWh) hour
- Georgia Power Rebates
- Annual financial cost based on estimated interest rates

DeKalb County School District Phase 1

Phase	Type	Region Assigned	Facility Name	School Name	Address	City_State Zipcode	Year Opened	Acreage	Sqare Footage
Phase 1	ES	Region 1	Huntley Hills Elementary Facility	Huntley Hills ES	2112 Seaman Circle	Atlanta, GA 30341	1964	10.5	54,012
Phase 1	ES	Region 1	Kingsley Elementary Facility	Kingsley ES Site	2051 Brendon Drive	Atlanta, GA 30338	1971	9.0	60,478
Phase 1	ES	Region 1	Woodward Elementary Facility	Woodward ES	3034 Curtis Dr. NE	Atlanta, GA 30319	1961	14.1	74,161
Phase 1	ES	Region 1	Montgomery Elementary Facility	Montgomery ES	3995 Ashford-Dunwoody Rd.	Atlanta, GA 30319	1963	12.1	67,216
Phase 1	ES	Region 3	Marbut Elementary Facility	Marbut Theme ES	5776 Marbut Road	Lithonia, GA 30058	1996	47.1	91,478
Phase 1	ES	Region 3	Pine Ridge Elementary Facility	Pine Ridge ES	750 Pine Ridge Drive	Stone Mtn, GA 30087	1988	13.6	87,192
Phase 1	ES	Region 3	Princeton Elementary Facility	Princeton ES	1321 S. Deshon Rd	Lithonia, GA 30058	2007	10.1	101,822
Phase 1	ES	Region 3	Rock Chapel Elementary Facility	Rock Chapel ES	1130 Rock Chapel Road	Lithonia, GA 30058	1969	9.5	71,143
Phase 1	ES	Region 3	Shadow Rock Elementary School Facility	Shadow Rock ES	1040 Kingway Dr	Lithonia, GA 30058	1991	15.2	117,776
Phase 1	HS	Region 3	Redan High Facility	Redan HS	5247 Redan Road	Stone Mtn, GA 30088	1976	38.7	258,889
Phase 1	MS	Region 3	Lithonia Middle School Facility	Lithonia MS	2451 Randall Ave	Lithonia, GA 30058	1965	27.5	172,159
Phase 1	MS	Region 3	Redan Middle Facility	Redan MS	1775 Young Rd	Lithonia, GA 30058	2003	26.7	161,263
Phase 1	ES	Region 5	Bob Mathis Elementary Facility	Bob Mathis ES	3505 Boring Road	Decatur, GA 30034	1975	10.0	69,401
Phase 1	ES	Region 5	Browns Mill Elementary Facility	Browns Mill ES	4863 Browns Mill Road	Lithonia, GA 30038	1990	20.8	75,978
Phase 1	ES	Region 5	Chapel Hill Elementary Facility	Chapel Hill ES	3536 Radcliffe Boulevard	Decatur, GA 30034	1967	11.4	69,150
Phase 1	ES	Region 6	Columbia Elementary Facility	Columbia ES	3230 Columbia Woods Dr	Decatur, GA 30032	1961	9.4	75,793
Phase 1	ES	Region 6	Snapfinger Elementary Facility	Snapfinger ES	1365 Snapfinger Road	Decatur, GA 30032	1964	9.2	87,316
Phase 1	ES	Region 6	Wadsworth Magnet School @ Knollwood	Wadsworth Magnet	3039 Santa Monica Dr	Decatur, GA 30032	1955	9.4	66,649

LED Lighting Phase 1 Mapped



Phase 1: LED Lighting Survey Findings/ Overview

LED Lighting Fixture Family

Fixture Family	Existing Qty of Fixtures	Proposed Qty of Fixtures
Troffer 1x4 (Fluorescent)	104	104
Troffer 2x2 (Fluorescent)	165	165
Troffer 2x4 (Fluorescent)	9,368	9,368
Troffer 2x4 (Linear LED)	387	387
Recessed Cans	648	648
Strip Fixtures	542	542
Industrial Fixtures	353	353
Wrap Fixtures	343	343
Direct/Indirect Fixtures	77	77
Vapor Tight	112	112
High Bay	42	42
Wall Packs (Exterior)	251	251
Drums (Exterior)	156	156
Canopy Fixtures (Exterior)	142	142
Floods (Exterior)	91	91
Shoe Box/Pole Lights (Exterior)	34	34
Misc (Dec, Inc, etc.)	173	173
zDo Nothing (LED Flat Panels)	7,085	
zDo Nothing (LED Trofferss)	680	
zDo Nothing (Existing LED, Dec, Theatrical, etc.)	3,325	
Grand Total	24,078	12,988

Existing Footcandle Levels

School Name	Hallway	Cafeteria	Classrooms	Gym	Media Center
Bob Mathis Elementary	25 - 65 FC	35 - 40 FC	40 - 55 FC	30 - 45 FC	45 - 55 FC
Browns Mill Elementary	55 - 115 FC	45 - 55 FC	30 - 40 FC	90 - 100 FC	40 - 55 FC
Chapel Hill Elementary	50 - 65 FC	20 - 25 FC	40 - 55 FC	35 - 45 FC	40 - 55 FC
Columbia Elementary	40 - 110 FC	35 - 45 FC	30 - 70 FC	90 - 100 FC	30 - 55 FC
Huntley Hills Elementary	40 - 55 FC	30 - 40 FC	40 - 45 FC	15 - 45 FC	30 - 40 FC
Kingsley Elementary	20 - 100 FC	35 - 45 FC	15 - 30 FC	90 - 100 FC	32 - 45 FC
Lithonia Middle	35 - 70 FC	30 - 35 FC	25 - 40 FC	60 - 70 FC	50 - 60 FC
Marbut Elementary	60 - 80 FC	60 - 70 FC	40 - 65 FC	10 - 20 FC	30 - 50 FC
Montgomery Elementary	5 - 30 FC	15 - 20 FC	30 - 60 FC	40 - 50 FC	15 - 20 FC
Pine Ridge Elementary	60 - 80 FC	35 - 50 FC	30 - 40 FC	30 - 40 FC	60 - 70 FC
Princeton Elementary	10 - 40 FC	70 - 80 FC	35 - 45 FC	30 - 45 FC	60 - 70 FC
Redan High	15 - 50 FC	35 - 65 FC	20 - 30 FC	35 - 80 FC	35 - 75 FC
Redan Middle	20 - 45 FC	20 - 30 FC	30 - 45 FC	20 - 35 FC	30 - 40 FC
Rock Chapel Elementary	15 - 40 FC	20 - 30 FC	30 - 40 FC	15 - 20 FC	40 - 50 FC
Shadow Rock Elementary	10 - 35 FC	30 - 40 FC	30 - 80 FC	25 - 35 FC	25 - 40 FC
Snapfinger Elementary	35 - 80 FC	40 - 55 FC	30 - 45 FC	10 - 20 FC	35 - 50 FC
Wadsworth Elementary	45-75 FC	40 - 55 FC	30 - 55 FC	30 - 100 FC	10 - 30 FC
Woodward Elementary	45-75 FC	30 - 40 FC	10 - 35 FC	60 - 80 FC	30 - 55 FC

Higher than IES Standards

Lower than IES Standards

Phase 1: LED Lighting Survey Findings/ Overview

Existing Conditions Summary

1. LED Flat Panel Fixtures (Hallways, Offices, Cafeterias, Media Centers)

- **Wattage Range:** 40W–60W (varied across spaces)
- **Mounting:** Fixtures not securely tied off to the structure above — potential safety and maintenance concern

2. Classrooms

- **Condition:** Not updated; many fixtures still fluorescent or older LED types
- **Lighting Quality:** Under-lit, with frequent lamp and ballast outages

3. Color Temperature

- **Mixed** (3000K / 4000K / 5000K), leading to inconsistent visual appearance

Key Issues Identified

- **Safety/Installation:** Hanging fixtures not properly supported
- **Lighting Uniformity:** Large variation in wattage and color temperature across spaces



DeKalb County School District – Value Proposition

LED Lighting Recommendation Options

- **Option 1** – Replace All Existing Troffers with New LED Flat Panels
 - Include Existing LED Flat Panels in Over Lit Areas - (3,149) Fixtures
 - Tie Off to Structure Above
- **Option 2** - Replace All Existing Troffers with New LED Flat Panels
 - Do Not Include Existing LED Flat Panels in Over Lit Areas - (3,149) Fixtures
- **Option 3** - Replace All Existing Troffers with New LED Flat Panels
 - Do Not Include Existing LED Flat Panels in Over Lit Areas - (3,149) Fixtures
 - Tie Off to Structure Above - (3,149) Fixtures



DeKalb County School District – Value Proposition

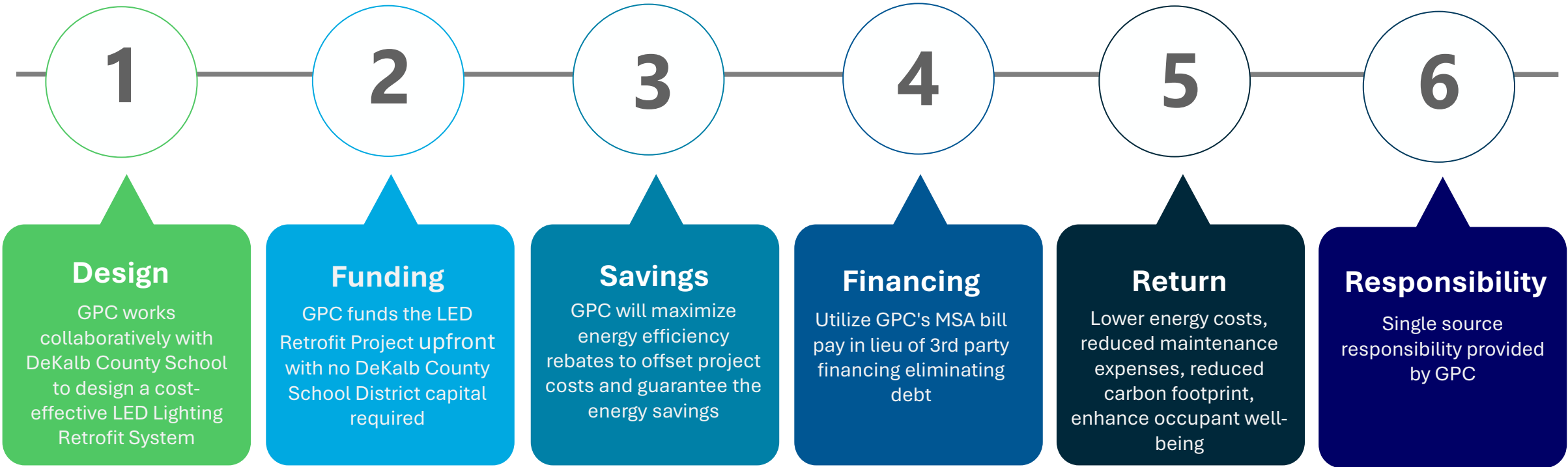
LED Lighting – Cash Proforma – Option 2

School	Price	Annual Savings				Payback (Years)	GPC Rebates
		Energy	HVAC	M&O	Total		
Bob Mathis Elementary	\$149,524	\$22,253	\$2,536	\$2,711	\$27,500	5.4	\$16,176
Browns Mill Elementary	\$162,669	\$32,674	\$4,988	\$4,188	\$41,849	3.9	\$17,598
Chapel Hill Elementary	\$31,698	\$2,434	\$93	\$493	\$3,020	10.5	\$3,429
Columbia Elementary	\$125,409	\$26,740	\$3,833	\$3,030	\$33,603	3.7	\$13,567
Pine Ridge Elementary	\$189,716	\$24,308	\$3,136	\$3,200	\$30,644	6.2	\$20,524
Princeton Elementary	\$275,809	\$29,789	\$4,104	\$5,347	\$39,239	7.0	\$29,837
Rock Chapel Elementary	\$148,439	\$21,729	\$2,942	\$3,005	\$27,676	5.4	\$16,058
Shadow Rock Elementary	\$142,087	\$18,706	\$2,412	\$3,649	\$24,767	5.7	\$15,372
Wadsworth Magnet & Knollwood ES	\$124,168	\$16,825	\$2,064	\$2,271	\$21,161	5.9	\$13,433
Huntley Hills Elementary	\$60,574	\$10,579	\$1,595	\$1,256	\$13,431	4.5	\$6,553
Kingsley Elementary	\$55,712	\$15,029	\$2,062	\$1,330	\$18,421	3.0	\$6,027
Marbut Elementary	\$162,670	\$24,752	\$3,290	\$3,714	\$31,756	5.1	\$17,597
Montgomery Elementary	\$21,794	\$5,366	\$475	\$648	\$6,488	3.4	\$2,358
Lithonia Middle School	\$287,237	\$30,730	\$4,076	\$6,548	\$41,354	6.9	\$31,074
Woodward Elementary	\$106,562	\$16,285	\$2,326	\$1,825	\$20,436	5.2	\$11,528
Redan High	\$418,271	\$40,717	\$6,733	\$8,007	\$55,457	7.5	\$45,250
Redan Middle School	\$138,761	\$18,238	\$1,910	\$3,018	\$23,165	6.0	\$15,010
Snapfinger Elementary	\$172,029	\$20,995	\$2,687	\$2,551	\$26,233	6.6	\$18,609
Total	\$2,773,129	\$378,149	\$51,263	\$56,788	\$486,200	5.7	\$300,000

Financial Overview	
Project Cost	\$2,773,129
Annual Savings	\$486,200
Annual Payment (10 yr., 7.0%)	(\$394,831)
Net Positive Cashflow	\$91,369



DeKalb County School District – Value Proposition





Georgia
Power

Our Path Forward

