

**AT THIS TIME A PATH PRESENTATION ON ENERGY EFFICIENCY AND  
BUILDING OPTIMIZATION WAS PRESENTED BY WILLIAM FRANKLIN**  
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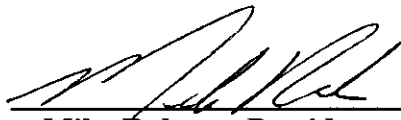
**ORDER: AUTHORIZE THE PATH INVESTMENT GRADE AUDIT**

Motion was made by Brent Larson, duly seconded by David Rikard, to authorize the PATH investment grade audit.

The vote on the motion was as follows:

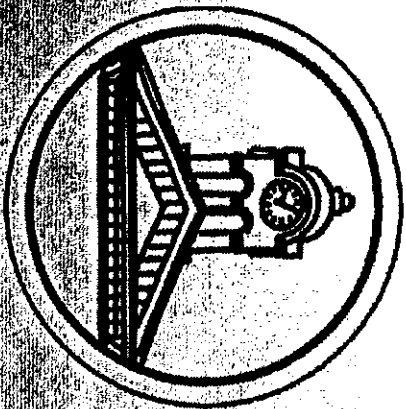
Supervisor Brent Larson, voted yes  
Supervisor Larry Gillespie, voted yes  
Supervisor David Rikard, voted yes  
Supervisor Chad McLarty, voted yes  
Supervisor Mike Roberts, voted yes

After the vote, President Roberts, declared the motion carried, this the 6<sup>th</sup> day of February, 2023.

  
\_\_\_\_\_  
**Mike Roberts, President  
Board of Supervisors**

  
\_\_\_\_\_  
**Sherry Wall, Chancery Clerk**

# P TH



*Lafayette County*  
MISSISSIPPI

## Energy Efficiency and Building Optimization

Preliminary Analysis Summary

February 2023

## 1. Preliminary Audit ✓

- PATH & Lafayette County determine general budgets, scopes & goals of the project
- Leadership votes to advertise Request for Qualifications (RFQ) for Energy Services and selects best responder

## 2. Investment Grade Audit (IGA)

- Detailed audit of County infrastructure: 4-6 months
  - Lighting inventory & HVAC documentation
  - Envelope evaluation (roofing, windows, doors, etc.)
    - Water usage analysis
- Nominal fee = \$75,000

## 3. Final Proposal

- Final project scope presented with line-item ECM scopes, fixed-firm price, guaranteed savings.
- Financial models developed – capital costs coupled with guaranteed savings and other funding sources to determine overall financial package

## 4. Project Authorization/Start

- Final Approval

# P TH

714

TOTAL \$	Sq. Ft.	Summary						Median EUI	Calculated Site EUI
		Total Utility Cost	Total Energy Cost	\$/sqft (Tot. Utility)	\$/sqft (Energy)				
		\$	\$	\$/sqft	\$/sqft			lbtu/sqft	lbtu/sqft
LCD Station 2	3,505	\$ 2,963	\$ 2,963	\$ 0.85	\$ 0.85			64	25
LCD Station 3	2,160	\$ 2,263	\$ 2,263	\$ 1.05	\$ 1.05			64	21
LCD Station 4	1,536	\$ 1,388	\$ 1,388	\$ 0.90	\$ 0.90			64	18
LCD Station 5	2,400	\$ 767	\$ 767	\$ 0.32	\$ 0.32			64	5
LCD Station 6	2,400	\$ 1,226	\$ 1,226	\$ 0.51	\$ 0.51			64	8
LCD Station 9	4,200	\$ 5,739	\$ 5,739	\$ 1.37	\$ 1.37			64	66
LCD Station 12	1,856	\$ 1,202	\$ 1,202	\$ 0.65	\$ 0.65			64	13
LCD Station 15	1,024	\$ 2,084	\$ 2,084	\$ 2.04	\$ 2.04			64	45
LCD Station 16	1,500	\$ 1,157	\$ 1,157	\$ 0.77	\$ 0.77			64	14
LCD Station 17	3,500	\$ 2,050	\$ 2,050	\$ 0.59	\$ 0.59			64	13
Courthouse	18,326	\$ 48,416	\$ 48,402	\$ 2.64	\$ 2.62			101	94
Chancery Courthouse	36,000	\$ 100,377	\$ 94,147	\$ 2.79	\$ 2.73			101	136
Department of Human Services	10,640	\$ 11,844	\$ 11,844	\$ 1.11	\$ 1.11			53	42
Justice Court	14,000	\$ 27,475	\$ 27,475	\$ 1.96	\$ 1.96			101	49
CHD Protective Services	10,560	\$ 10,815	\$ 10,815	\$ 1.02	\$ 1.02			53	25
Jail	61,536	\$ 173,272	\$ 124,808	\$ 2.82	\$ 2.03			70	111
Office of District Attorney	13,000	\$ 3,947	\$ 3,733	\$ 0.30	\$ 0.29			53	8
LCD - Central Station	9,613	\$ 14,525	\$ 13,610	\$ 1.51	\$ 1.42			64	68
Library	30,832	\$ 20,745	\$ 19,709	\$ 0.67	\$ 0.64			72	28
Arena	10,560	\$ 31,662	\$ 31,662	\$ 3.00	\$ 3.00			56	119
Haven House	16,024	\$ 4,866	\$ 4,866	\$ 0.30	\$ 0.30			62	7
Abbeyville Community Center	3,780	\$ 2,442	\$ 2,442	\$ 0.65	\$ 0.65			56	15
Abbeyville Community Center Storage	12,540	\$ 1,232	\$ 1,232	\$ 0.10	\$ 0.10			56	1
Law Enforcement Training Facility	1,600	\$ 2,829	\$ 2,829	\$ 1.77	\$ 1.77			52	39
Welfare Offices	9,442	\$ 5,707	\$ 5,274	\$ 0.60	\$ 0.56			53	24
County Justice	3,600	\$ 4,760	\$ 4,287	\$ 1.32	\$ 1.19			53	46
Mississippi Highway Patrol (MHP)		\$ 6,146	\$ 6,146					53	
Mental Health Department (MHD)		\$ 17,373	\$ 17,373					53	
Berry/Garage	1,200	\$ 13,494	\$ 12,238	\$ 11.24	\$ 10.20			23	299
Drug Court	8,101	\$ 2,772	\$ 2,772	\$ 0.34	\$ 0.34			101	29

# P TH<sup>TM</sup>



HVAC Controls



HVAC Retro-Commissioning



# P/TH<sup>TM</sup>



# PAT<sup>h</sup>

## PROBLEM

With the oldest continuously-used courthouse in the state (Tate County) experiencing envelope issues and needing major HVAC repairs/replacement, the county's Board of Supervisors & Administrator needed a unique way for the county to tackle the aforementioned issues at the courthouse. The county's leadership also desired a partner with expertise in not only government infrastructure but also with public finance packaging.

## SOLUTION

PAT<sup>h</sup> delivered a project that included comprehensive upgrades to the county's lighting infrastructure as a foundation for energy savings. The energy efficient measures generated substantial savings for Tate County and created the opportunity to redesign/replace the entire HVAC system at the courthouse and eliminate future courthouse water intrusion issues (new gutter system and envelope repairs). Additionally, PAT<sup>h</sup> facilitated the repainting of the courthouse exterior to improve the overall aesthetics of this historic building that had experienced accelerated wear & tear.



## BUILDING DETAILS

- 14 buildings (including county jail & courthouse)
- ~132,000 sq/ft of interior building space

### List of Improvements

- Comprehensive interior/exterior LED lighting upgrade
- HVAC replacement/repairs (courthouse)
- Flat roof and gutter replacement
- Envelope upgrades & waterproofing (courthouse)



## FINANCIAL DETAILS

- Tate County pre-project annual energy budget: \$193,579
- Annual post-project energy savings: \$40,990
- Annual post-project operational savings: \$7,437

- Additional CapEx project (Courthouse HVAC system replacement & envelope upgrades) achieved within annual budget



"Their (PAT<sup>h</sup>) attention to detail and dedicated man hours resulted in a project that will save our county thousands of dollars annually on utilities. They were also able to uncover deferred maintenance needs to the historic Tate County Courthouse that were not included in the county's budget and there was no clear plan as to how these needed repairs would be funded."

Trey Lamar County Board  
Attorney Tate County, MS

# PATh

## PROBLEM

Faced with the prospect of entering the summer without a fully-functional HVAC system in their courthouse, Weakley County, TN needed solutions that could be implemented quickly and effectively while limiting the financial burden on the County's budget. Recurring problems (water leaks) with the existing system mandated a complete re-design of the Courthouse HVAC system - further complicating things from both a timing and cost perspective

## SOLUTION

PATh was able to design four different options for a new HVAC system which allowed County stakeholders the opportunity to choose the system that worked best for them. At the same time, PATh designed a county-wide energy project that included LED lighting, HVAC controls, HVAC retrocommissioning, and water-conservation measures. This energy project produced savings that would offset some of the costs of the Courthouse HVAC project. It should be noted that PATh was able to fully develop this project in just under 3 months from the first call to project approval.

## BUILDING DETAILS

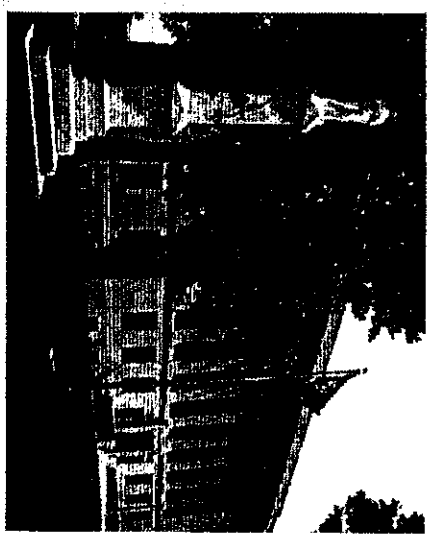
- 6 buildings (including county jail & courthouse)
- ~103,000 sq/ft of interior building space

### List of Improvements

- Comprehensive interior/exterior LED lighting upgrade
- HVAC replacement (courthouse)
- HVAC Retrocommission and Controls (all buildings)
- LED Lighting (all buildings)
- Water Conservation Measures (all buildings)

## FINANCIAL DETAILS

- Weakley County pre-project annual energy budget: \$192,250
- Annual post-project energy savings: \$42,340
- Annual post-project operational savings: \$19,427



"PATh is far and away the most qualified and professional group I have had the fortune with which to work. In an environment where taxpayer money is involved, it is critically important to utilize time and money in the most efficient way possible. You will find no better partner to help accomplish this goal than PATh."

Jake Bynum County Mayor  
Weakley County, TN



1. Professional Development Agreement (PDA) approved and signed
  2. PATH performs Investment Grade Audit and Design (4-6 months)
  3. Final proposal presented and County Board of Supervisors votes to approve project
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## A. Preliminary Audit ✓

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