

The $100 Million Breakthrough:

Unlocking Campus Efficiency and Sustainable Growth at NSU Florida

Smart Buildings 2026



INTRODUCTION

Richard Scannell

Chief Executive Officer

ORGANIZATION

Lambent

Executive Leadership & Vision

Spearheading strategic growth and occupancy analytics solutions for smart campus space management.

Efficient Use of Space with Lambent Occupancy Analytics

Reduce Energy Consumption Based on Occupancy Patterns

1

Assigned vs Occupied: Measuring what you expect vs what is happening

2

Restacking space to make better use of Real Estate

3



Challenge 1:

Energy Costs Management

How Occupancy can reduce energy consumption

The Economic Challenge of Campus Energy

$6 Billion

Total annual energy spend by US colleges and universities

5% – 10%

Portion of institutional operational budgets consumed by energy

Cost Intensity

Average spend of **$1.10 per sq ft** on electricity and 18¢ on natural gas

Complex Facilities

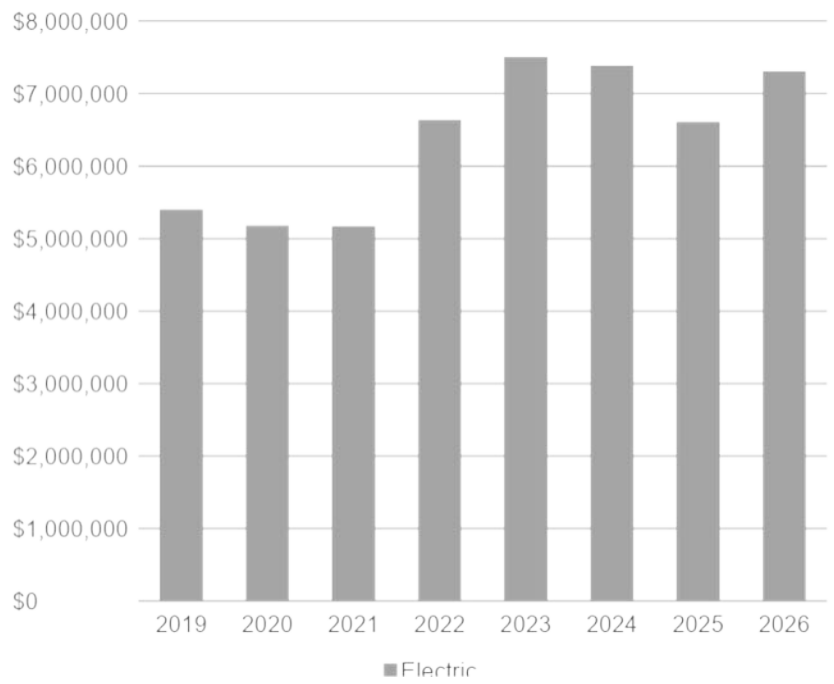
Diverse environments including energy-intensive research labs, dining, and residence halls

Market Volatility

Unpredictable utility rates and significant peak demand charges compound expenses

Utilities - Electric

FY	Consumption (kWh)	Cost	Square Footage (SF)	kWh/SF
2019	80,681,547	$5,398,779	5,500,246	14.7
2020	80,651,867	$5,178,600	6,583,013	12.2
2021	77,912,447	$5,168,685	6,749,073	11.5
2022	82,220,774	$6,634,552	6,754,073	12.1
2023	83,130,026	$7,504,888	6,879,797	12.0
2024	82,715,133	$7,384,906	6,935,582	11.9
2025	81,107,019	$6,611,019	6,739,460	12
2026	82,634,981	$ 7,307,537	6,740,612	12.3



COST PER KWH TREND

Average $/kWh from 2019–2023 increased from $0.07 to $0.09 before tapering back to $0.082 in 2025.

ACCOUNT GROWTH

Electricity accounts increased by 16 (from 65 to 81 accounts) between FY 2019 and FY 2025.

CURRENT RATE

Current average $/kWh stands at approximately **$0.09** across all active accounts.

BAS Integration with Lambent

payments
Cost Savings on Energy Bills

build_circle
Extended Equipment Lifespan

eco
Improved Environmental Impact

speed
Enhanced Operational Efficiency

Building	Weekly Run Hours	After Setback	Savings Hours	Percent
Maltz Psychology	560	423.5	136.5	-24%
Carl DeSantis	2,310	1,847.5	462.5	-20%
Shepard Broad Law	1,496	1,215.5	280.5	-19%
Parker	13,888	11,718	2,170	-16%
HPD Assembly 1	1,344	1,032	312	-23%
HPD Assembly 2	392	259	133	-34%
HPD Lab Library*	336	221.5	114.5	-34%
Totals	20,326	16,725.5	3,600.5	-18%

Lambent Heatmap Used for Reductions



Zone Occupancy by Day of Week and Hour-of-Day

Average occupancy by hour of day and day of week for the selected floors. Filtered by Hours of Operation and Days of Week, if set.

Avg Occupancy / Day of Week	Hour of Day Interval: 05 AM-06 AM	06 AM-07 AM	07 AM-08 AM	08 AM-09 AM	09 AM-10 AM	10 AM-11 AM	11 AM-12 PM	12 PM-01 PM	01 PM-02 PM	02 PM-03 PM	03 PM-04 PM	04 PM-05 PM	05 PM-06 PM	06 PM-07 PM	07 PM-08 PM	08 PM-09 PM	09 PM-10 PM	10 PM-11 PM
Sunday	0	0	0	0	0	1	1	1	2	2	2	2	2	2	2	1	1	1
Monday	0	0	1	4	4	15	15	4	13	16	19	16	4	2	1	1	1	1
Tuesday	0	0	1	6	7	12	12	6	19	23	25	20	5	6	5	1	1	0
Wednesday	0	0	1	8	15	9	7	8	13	11	8	5	3	3	2	1	1	1
Thursday	0	0	1	3	4	8	8	9	15	14	14	12	4	4	2	1	1	0
Friday	0	0	0	1	3	9	7	8	9	9	14	12	3	1	1	1	1	1
Saturday	0	0	0	0	1	1	1	1	1	1	2	1	1	1	2	1	1	1

BEFORE 7:00 AM

Zero Occupants

Heatmap data confirms no one is ever in the buildings before 7:00 AM.

AFTER 7:00 PM

1–2 People

Only 1 or 2 people remain in the facilities during late evening hours.

REDUCTION OPPORTUNITY

Eliminate 24/7 Schedule

Buildings were kept open 24/7 unnecessarily. Adjusting schedules will drive significant energy savings.



Challenge 2:

Portfolio Management

How to manage perceived growth demand

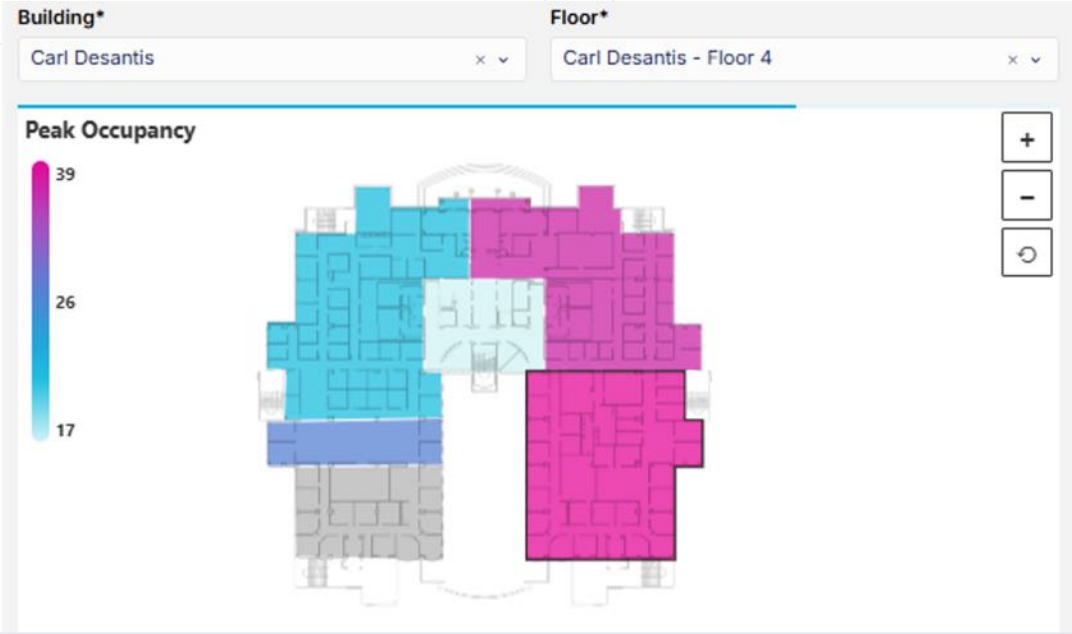
DeSantis Deep-Dive

DeSantis Overview

- **200K sq ft** Building
- **300+ offices** (4th & 5th floors)- severely underutilized

Key Utilization Metrics

- Average Occupancy: **35-40%**
- Underutilized Space: **60-65%**



Classroom Insight: Scheduled for 40-80 students, yet average occupancy remains at **30%**.



Challenge 3:

Portfolio Restack

Effectively Restack space for efficiency

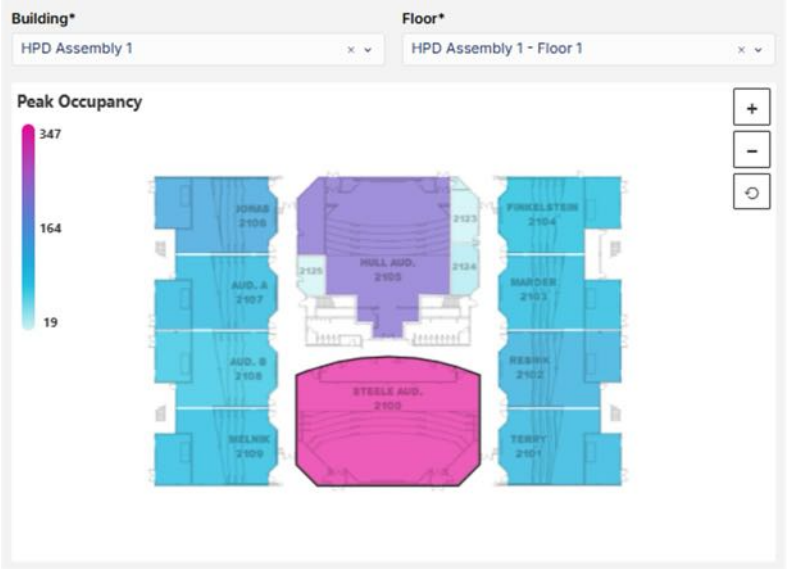
Real Estate Optimization Strategy

Sale of Excess Real Estate

- **Asset Disposal:** Sold 2 buildings totaling 80,000 SqFt of AC space and 10 acres of land.
- **Revenue Generation:** Realized **$22 Million** from the sale.
- **OpEx Reduction:** Reduced annual operating expenses by **$650,000**.
- **Cost Avoidance:** Avoided **$1.8M** in 40-year recertification costs.

Consolidation of Leased Space

- Reduction of **40,000 sq ft** of leased space.
- **$1.5 Million** Annual Operating Expense savings.

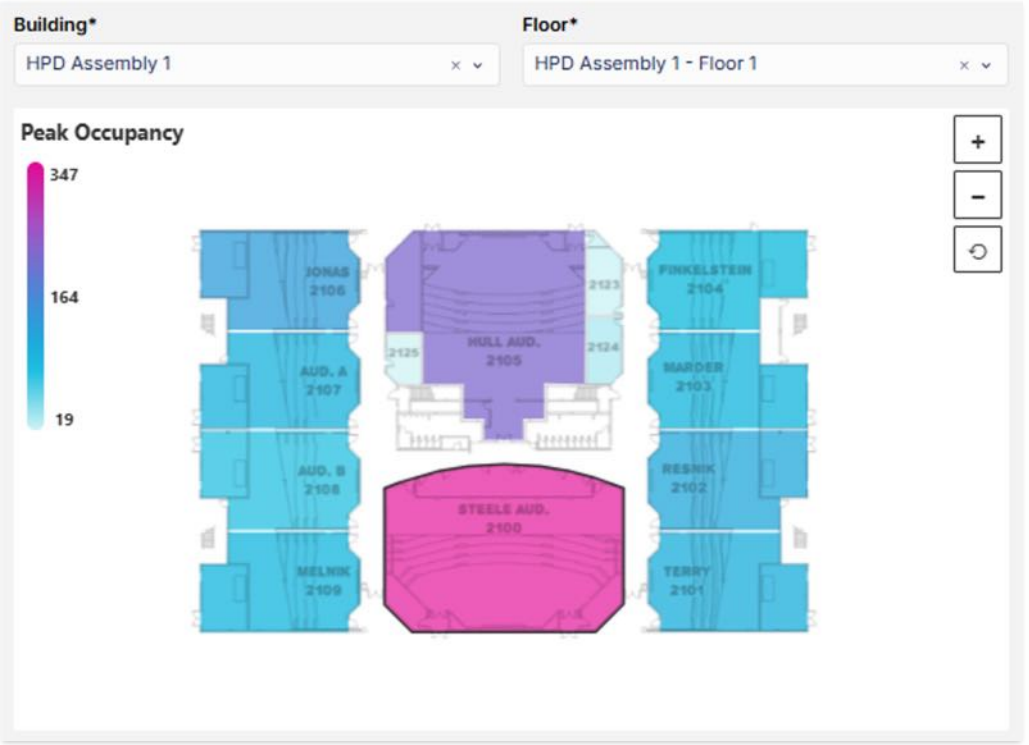


$70Million Cost Avoidance

Eliminated New Construction: The need to rebuild an outdated building

Lease Avoidance: No need for a short term lease for temporary student dining hall

Identified Swing Space: Occupancy analytics showed alternative existing space on campus





How Lambent Works

The value of predictive analytics for space planning

Lambent Spaces | The premier Occupancy Analytics platform for smart campus space management

Existing Infrastructure
Leverages existing Wi-Fi; no additional sensors required.

Privacy First
Anonymized data with no Personally Identifiable Information (PII).

Rapid Scaling
Scales to millions of square feet in just hours.

Continuous Analytics
Continuous data collection with rich historical analytics.



TRUSTED BY LEADING INSTITUTIONS

George Mason University · The University of Tennessee Knoxville · Northwestern University · NSU Florida · Brown University · Grand Valley State University · Lambent Spaces

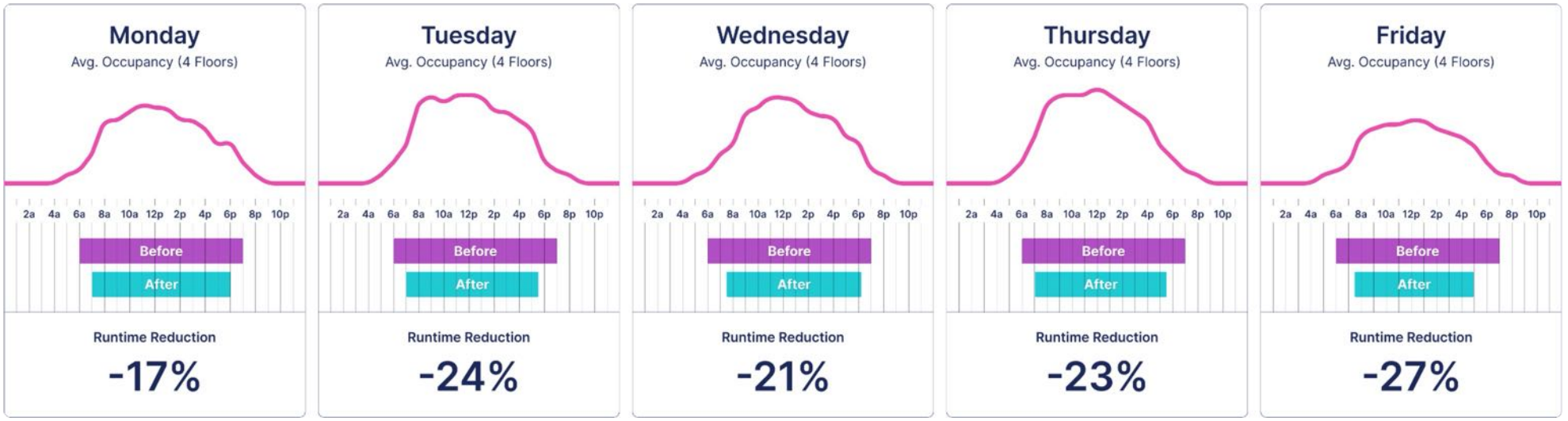
HVAC Setback

Use occupancy trends to set HVAC time-of-day setback and optimal start schedules.

Weekly Setback Report

Square Footage	Run Hours (Before)	Run Hours (After)	Savings Hours	Runtime Reduction
25.1K	3,419	2,701	718	-22.4%

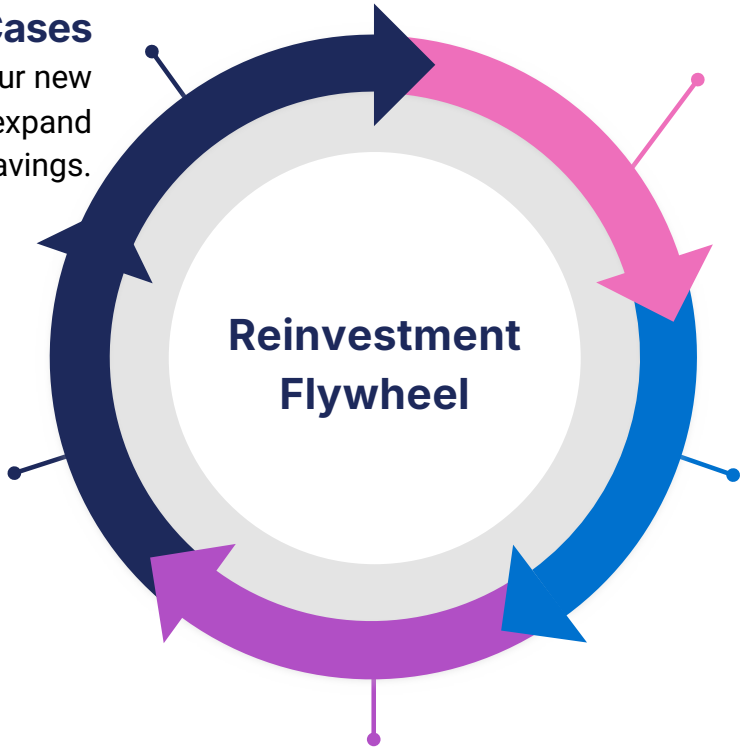
Days of Week Setback Summary



How to Use Lambent to Reinvest in your Campus

New Use Cases

Beyond HVAC setbacks, use your new campus-wide occupancy to expand use cases and savings.



Partner with Lambent

Lambent's rapid, rolling deployment process can start gathering data for hundreds of buildings in a single day.

Enrich a Large-Scale Deployment

Retained savings will support a full Lambent roll out at floor level and expanded zone areas.

Monitor, Record, Validate (MRV)

Use Heatmaps to gauge how buildings are used and identify opportunities for HVAC setbacks. Calculate savings from energy consumption based on kw per hour.

Integrate with BAS Company

Data-led HVAC setbacks across campus.

How it Works

Privacy by Design: All data anonymized before processing. Zero PII, Full FERPA Compliance, Role-Based Access Control

Connect

Connect our collector to your Wi-Fi data streams and anonymize before data leaves your environment.

1

Analyze

AI models clean and interpret occupancy, device movement, and space usage trends.

2

Act

Dashboards & Insights drive operations, planning, and strategy.

3