CASE STUDY

Is my HVAC working efficiently? Why are operating costs increasing?

PROBLEM

A commercial building owner was tired of unexplained and unexpected HVAC bills.

FINDINGS

The Talos monitoring system was installed (within 15 minutes) and quickly uncovered key problems that would have led to catastrophic failure of the HVAC system:

- All 3 units operating 24 x 7
- Refrigerant problems in 2 of the units
- Economizers were set incorrectly or failed
- Compressor damage due to operating while outdoor temperatures were 60°F or below
- 1 compressor was under -performing while the other 2 were overtaxed
- 1 compressor started & stopped every 3 minutes causing permanent damage
- 1 failed condenser fan motor

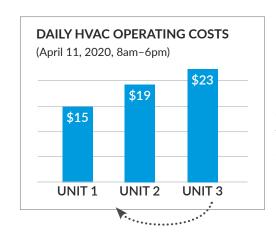
STATS

30,000 square feet

2-25 ton units

1-30 ton unit

Average age of HVAC units: 3 years



Unit 3 costs over 35% more than Unit 1 in the same building

RESULTS

After addressing the problems uncovered and continuously monitoring the units, the HVACs are expected to reach their 15-year life expectancy (they were previously on course for catastrophic failure).

\$24,300

Annual savings in utility expenses

12 weeks



FINANCIAL TABLE

Investment	\$7,050
Yearly Net Savings	\$ 24,300
Simple Payback/Months	2.9
Net Present Value (NPV)	\$257,229
Internal Rate of Return (IRR)	317%

