Fanny Allen Hospital - Energy Action Plan (2014)

Purpose: To reduce operational cost savings, improve building comfort & performance, improve patient experience, be an effective steward of resources, and reduce our environmental impact.

Current: FY13 electricity cost: **$805,371** FY13 gas cost: **$252,187**

FY13 kWh consumption: **3,084,807** FY13 ccf consumption: **123,034**

Goals: Reduce our overall energy load at Fanny Allen and the Medical Center Campus by 1,000,000 kWh and 150,000 ccf

Team: Erik Lahr, Dave Healy, Peter Irving, Wes Pooler, Tim Perrin (EVT), Maribella Ibarra (EVT), Bo Petersson (Cornerstone)

Submitted by: Wes Pooler, Director of Facilities Management **Reviewed by:** Timothy Perrin, Account Manager

Action Plan FY14 & FY15		
1. Chiller Plant Optimization		
- Evaluate cooling tower fans/VFD		
- Evaluate sequence of operations in the chilled water system		
- Evaluate chiller controls		
2. Boiler Plant Optimization		
- Evaluate combustion management controls		
- Evaluate a process boiler in order to minimize gas consumption		
- Replace steam traps		
3. Improve the building envelope		
- Replace windows and doors where necessary and feasible		
4. Lighting Upgrades		
- Upgrade interior lighting to LED technology		
- Upgrade exterior lighting to LED technology		
5. Lighting Controls / Energy Management System Upgrades		
- Evaluate opportunities for improved lighting controls		
- Evaluate and institute off-hours setbacks on HVAC systems		
6. Building Management System Upgrade		
- Evaluate and program Honeywell controls system to maximize efficiencies		
7. Upgrade or optimize HVAC systems		
- Evaluate potential for night setbacks		
8. Operating Efficiencies		
- Coil cleaning		
- Filter changes		
- Evaluate UV technology for air systems		

Completed Efforts FY 13 & FY14

Project Description	Date	Proj. Costs	Incentives	Annual	kWh Reduce	ccf Reduce
Exterior Wall pack Lighting Upgrade	Feb13	$ 2,975	$ 2,100	$ 1,731	3,186	
Steam Trap Replacement	Sep13	$ 20,827		$ 22,940	N/A	59,747
Lighting Upgrade - Phase 1	Jun14	$ 99,506	$ 16,770	$ 6,004	59,111	
LED Fixtures	Jun14	$ 100,000	$ 31,000	$ 11,000	113,000	
Energy Audit (Cornerstone Cx)	Feb14	$ 24,000	$ 16,000	N/A	N/A	N/A
Totals:		$ 247,308	$ 65,870	$ 41,675	$ 175,297	$ 59,747

Total Energy Use per Square-Foot