

Facility Maintenance Decisions Achievement Award Category Financial Management

Our Vision

To provide outstanding customer service through teamwork, innovation, and the development of positive relationships for today and tomorrow.

Our Mission

To provide safe, quality, sustainable, and well-maintained facilities and services for the citizens and employees of Orange County through high standards of integrity, professionalism, and ethics.

Orange County, Florida, with a population of 1.3 million people, is recognized as the number one tourist destination in the United States. Over 60 million tourists visit the central Florida attractions, resorts, and convention centers every year which are predominately located in Orange County. Orange County Government (OCG) has over 400 buildings, comprised of 5.3 million square feet, which serve the citizens and visitors of the county. Orange County Facilities Management (OCFM) is responsible for the operations and maintenance of all the facilities. Under the leadership of Richard F. Steiger, Jr., FMA, the division is comprised of overseeing contract management, capital projects, energy conservation and sustainability, maintenance operations, worksite services, training and development, warehouse operations, and mail distribution. OCFM currently has six maintenance districts totaling 160 skilled employees.

Under the direction of Mr. Steiger, the energy management and sustainability initiative was addressed to understand the impact this function had on the financial outlay of the operation. Rising energy consumption, increased utility demand charges and rates, and excessive wear and tear on MEP systems were all causing a major drain on available finances. Therefore, a decision was made to create a plan to determine a course of action to both contain these rising expenses and build a long term solution for sustainability. The plan objectives were broken into several components.

1. Needs Analysis - What is the current energy consumption for County facilities greater than 20,000 ft²? Of the 400+ buildings only 14% are larger than 20,000 ft², but make up 72% of the total conditioned space.
2. Energy Assessment - Perform energy audits and sustainability studies for these facilities?
3. Controls Analysis – Are current Building Automation Systems (BAS) operating at peak efficiency and effectiveness? Does the County have BAS specifications that meet the needs of the buildings?
4. Certification and Compliance – Is OCFM working toward Leadership in Energy and Environmental Design (LEED) certification of facilities in accordance with the United States Green Building Council (USGBC)? Is the County meeting local, municipal and state codes and recommendations for energy efficiency?
5. Costing and Recommendations – How much will the initiative cost, both short and long term? Provide a detailed action plan for incremental implementation of the recommended actions.

OCFM realized professional services (engineers, consultants, SME's, etc.) would be needed to perform the necessary assessments in order to provide viable solutions and recommendations. Beginning in 2012

- 2013, the County began awarding contracts for professional services to provide deliverables based upon the scope of services required to meet these objectives. Interdepartmental cooperation and participation was required to engage professional services and acquire the needed information. Facilities Management Division, Capital Projects Division, Fiscal Department, Procurement and Administrative Services all worked in conjunction to support the task of ensuring the assessments were performed so the information gleaned could be utilized.

As the assessments were received, budget preparation began in earnest to secure the funding necessary for the implementation of the recommendations. Budget forecasting, project prioritization and assignments, timelines, and submissions to senior staff were implemented to receive funding and authorizations to implement the recommendations. Project plans began to take shape and tasks were assigned to associated trades and specialties.

By 2014, projects were in full swing to accomplish the recommendations provided by the professional assessments. Since the projects consisted of both short and long term assignments, and many consisted of multiple disciplines and tasks, again, interdepartmental participation was required. Communication and collaboration between departments was critical to ensure projects stayed on track and were completed on time.

Projects performed:

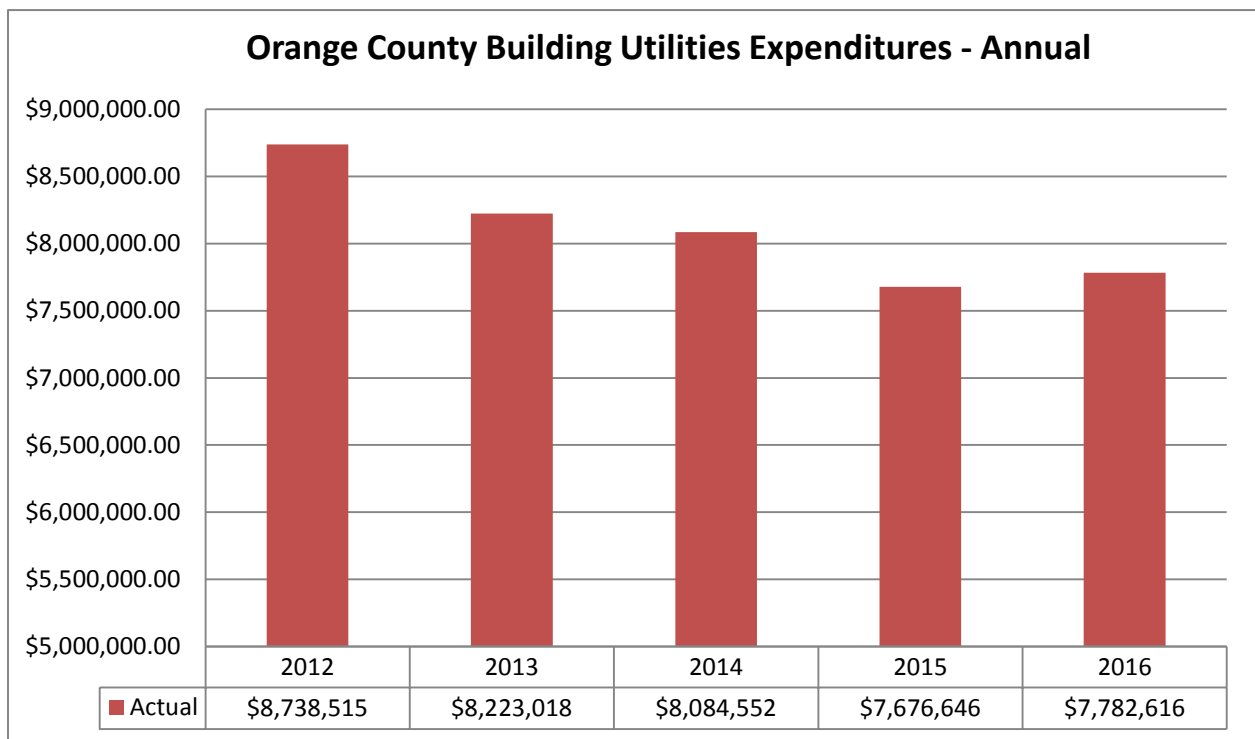
- Replace fluorescent light fixtures with LED energy saving fixtures both interior and exterior. Seek rebates offered by utility providers for Energy Star upgrades.
- Establish BAS specifications and criteria and work with system engineers to tweak current HVAC and lighting systems start-stop times to obtain maximum efficiency and effectiveness.
- Retrofit water fixtures with “low-flow” devices and automated “hands-free” sensors.
- Life-cycle replacement of chillers, AHU’s and other HVAC components with High Efficiency (HE) devices.
- Implement computer-assisted facility management (CAFM) software to enable data mining, trend analysis, project forecasting, asset life-cycle costing (LCC) and to establish a facility condition index (FCI) for each building (benchmarking).

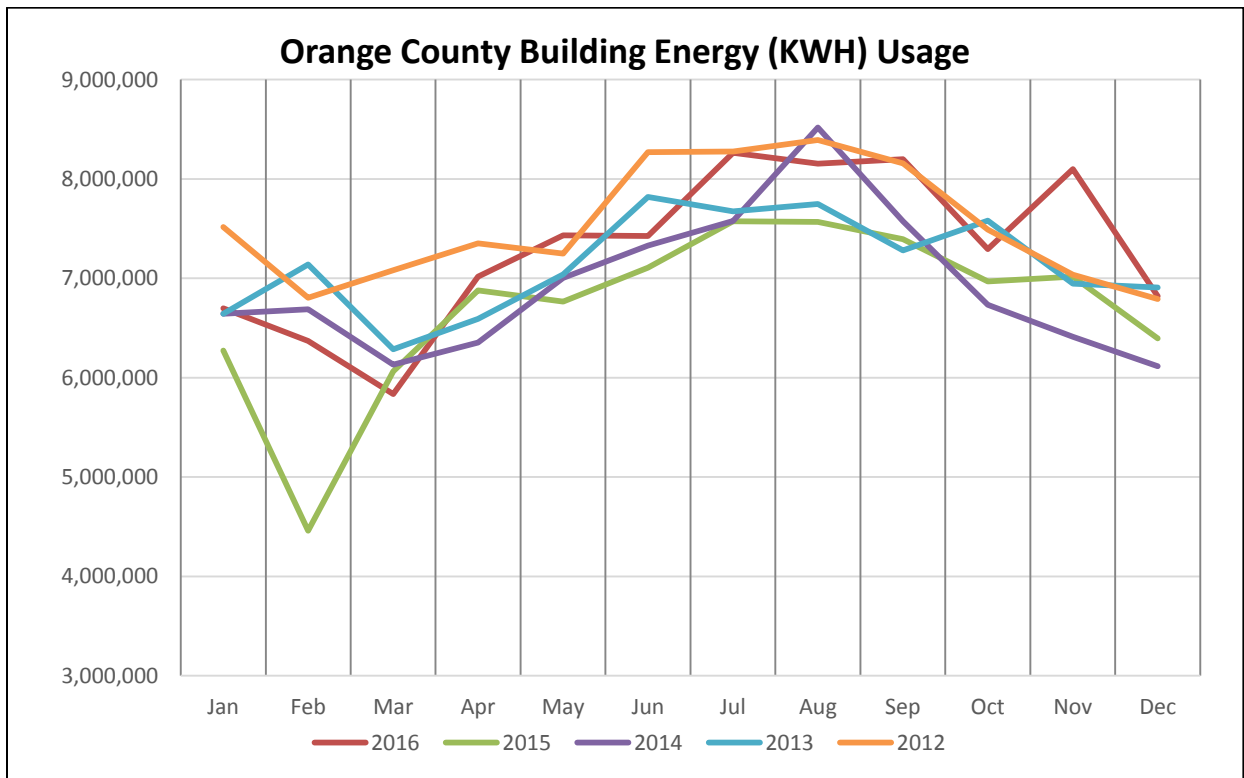
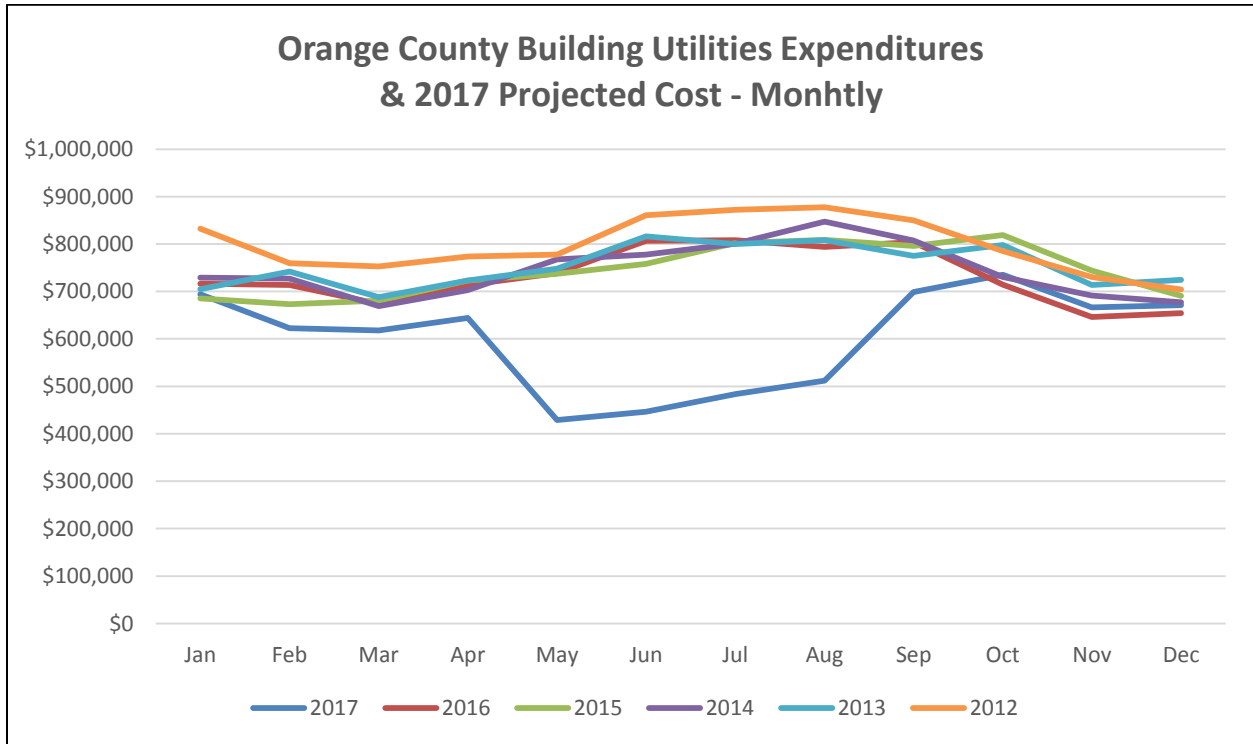
By 2014-2015, cost savings realizations began to become apparent. Return on investment (ROI) indicators showed up in the form of reduced utility bills, meeting budgeted expenses without requesting additional funding for shortfalls and utilization of savings to accomplish additional projects (re-investment). An intangible realization came by way of increased customer satisfaction due to a decrease in equipment failures. As additional square footage was added to the maintenance inventory, utility costs remained low. In addition, since 2013 the division has received over \$15,000 a year in rebates from energy providers. This year, over \$50,000 in rebates will be earned which is the largest the division has ever received.

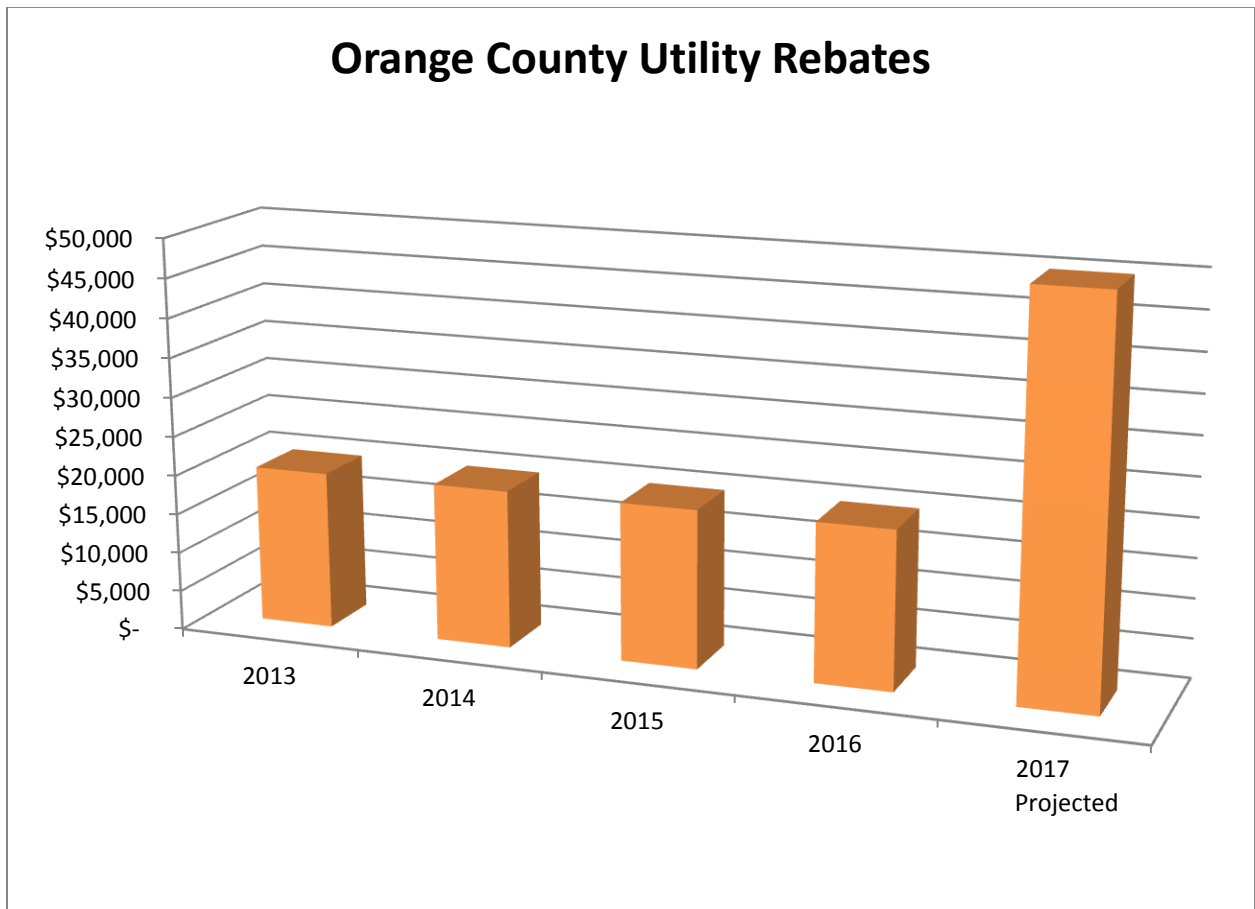
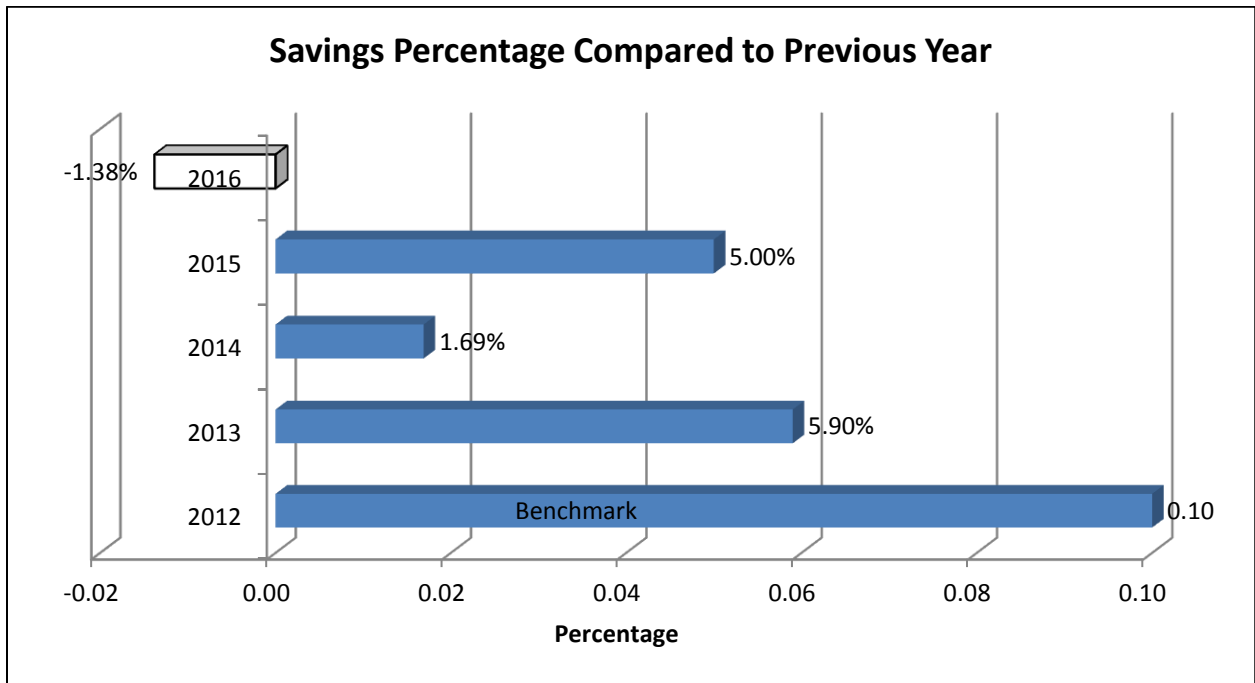
The Board of Orange County Commissioners describes environmental stewardship as both a key responsibility and a critical legacy of any elected public body. It is the County’s responsibility to promote efficient and prudent use of energy resources, the promotion of energy conservation, and support for alternative energy sources. Energy efficiency and conservation are vital components of intergovernmental environmental efforts. Local government actions play a fundamental role in

implementing energy efficiency and conservation efforts. Facilities Management was charged with reducing energy consumption as part the County’s sustainability efforts.

Over the last several years, Facilities Management has made notable strides towards improving the energy efficiency in County buildings, facilities, and operations through energy projects to meet the County’s sustainability efforts. The implementation of these energy projects was an enormous undertaking but went smoothly and efficiently and the results have been outstanding as demonstrated in the charts below. Our energy conservation efforts will continue as the potential to reduce overall energy demand, costs, and consumption is always changing.









Training and Development Team



(From Left to Right)

- Dean Cousins- District Maintenance Supervisor
- Jorge Cedeno- District Maintenance Supervisor
- David Zavatiski- District Maintenance Supervisor
- Rich Steiger- Manager
- James Buys- District Maintenance Supervisor
- Julian Newton- District Maintenance Supervisor
- John Farriss- IT Intern