

**Wayne State University**

**Utility Pilot Project Design Team**

**Pilot Methodology**

Contents

[Executive Summary 4](#_Toc315300022)

[Summary of Recommendations 4](#_Toc315300023)

[1. Design Team 4](#_Toc315300024)

[1.1 Executive Sponsor 4](#_Toc315300025)

[1.2 Membership 4](#_Toc315300026)

[1.2.1 Core Team Membership 4](#_Toc315300027)

[1.2.2 Advisory Team Membership 4](#_Toc315300028)

[1.3 Charge 5](#_Toc315300029)

[1.4 Goals 5](#_Toc315300030)

[2. The Pilot Phase 5](#_Toc315300031)

[2.1 Overview 5](#_Toc315300032)

[2.2 Selection of Participants and Sites 5](#_Toc315300033)

[2.3 Methodology 5](#_Toc315300034)

[2.3.1 Baseline 5](#_Toc315300035)

[2.3.2 Rate 6](#_Toc315300036)

[2.3.3 Assignment of Space 6](#_Toc315300037)

[2.3.4 Hold Harmless Period 7](#_Toc315300038)

[2.4 Surcharge 7](#_Toc315300039)

[2.4.1 Operational Costs 7](#_Toc315300040)

[2.4.2 ECM Grant Program Fund 7](#_Toc315300041)

[2.5 Proposed Initial Rate 8](#_Toc315300042)

[2.5.1 Annual Adjustments 8](#_Toc315300043)

[2.6 Supporting Behavioral Changes 9](#_Toc315300044)

[2.7 Gathering Feedback 9](#_Toc315300045)

[3. Program Governance 9](#_Toc315300046)

[3.1 The Utilities Advisory Committee 9](#_Toc315300047)

[3.1.1 Responsibilities 9](#_Toc315300048)

[3.1.2 Authority 10](#_Toc315300049)

[3.1.3 Membership 10](#_Toc315300050)

[Permanent Members 10](#_Toc315300051)

[Rotating Members 10](#_Toc315300052)

[3.1.4 Meeting Frequency 10](#_Toc315300053)

[3.2 The Utilities Executive Board 10](#_Toc315300054)

[3.2.1 Responsibilities 10](#_Toc315300055)

[3.2.2 Meeting Frequency **Error! Bookmark not defined.**](#_Toc315300056)

[3.2.3 Authority **Error! Bookmark not defined.**](#_Toc315300057)

[3.3 Staff Support 11](#_Toc315300058)

[3.4 Conflicts of Interest 11](#_Toc315300059)

[4. Technology Requirements **Error! Bookmark not defined.**](#_Toc315300060)

[5. Space Management Requirements **Error! Bookmark not defined.**](#_Toc315300061)

[6. Utilities and Energy Management Division **Error! Bookmark not defined.**](#_Toc315300062)

[~~7.~~ ~~Glossary of Terms~~ **Error! Bookmark not defined.**](#_Toc315300063)

[8. Appendixes 12](#_Toc315300064)

Executive Summary

Summary of Recommendations

# Design Team

In October 2011, a Design Team was established to facilitate implementation of a pilot utility budgeting process which included developing WSU’s methodology for on-going operations of this new program. To achieve this objective, the team benchmarked other large universities that had implemented similar programs, assessed WSU’s current capabilities, analyzed space and utility data, and gathered feedback from participating and administering entities on campus.

## Executive Sponsor

Jim Sears, Associate Vice President for Facilities Planning and Management is the Executive Sponsor of the initiative.

## Membership

The formal Design Team consisted of four (4) core team members representing Facilities Planning and Management, the Office of Budget Planning and Analysis, and the Office of the Vice President for Finance and Business Operations. Three (3) members of the Huron Consulting Group provided advisory support.

### Core Team Membership

|  |  |
| --- | --- |
| **Larry Fodor (Chair)**  Director of Energy Management  Facilities Planning and Management  Wayne State University | **Ricardo Kisner**  Senior Director of Business Process Improvement  Office of Finance and Business Operations  Wayne State University |
| **Celeste Lezuch**  Senior Director  Office of Budget Planning and Analysis  Wayne State University | **Angela Strickland**  Director of Business Services  Facilities Planning and Management  Wayne State University |

### Advisory Team Membership

|  |  |
| --- | --- |
| **Andrew Billing**  Higher Education Consulting Practice  Huron Consulting Group | **Bob Hascall**  Higher Education Consulting Practice  Huron Consulting Group |
| **Dara Moses**  Higher Education Consulting Practice  Huron Consulting Group |  |

## Charge

The Design Team was charged with developing a high-level methodology for implementing a pilot program at WSU that would incentivize its users to conserve energy by reallocating utility budgeting responsibilities to the units and departments.

## Goals

The Design Team established the following goals to guide its work in developing a methodology for the pilot units:

1. Focus on conserving energy
2. Establish a straight-forward and easy-to-understand system
3. Ensure transparency
4. Allocation of utilities should be based on accurate and reliable data

# The Pilot Phase

## Overview

In order to provide for a successful implementation of the utility cost allocation program at WSU, it was determined that an “off the books” pilot program should be established for FY 2012.

## Selection of Participants and Sites

The pilot sites were selected by the Committee in consultation with the Associate Vice President for Budget Planning and Analysis. The pilot sites were selected because each building primarily housed a single unit and not multiple units. In addition, each structure is separately metered for utilities making it fairly easy to obtain data. The following three schools met these criteria, and agreed to participate in the pilot phase of the program:

* College of Nursing (Cohn Building)
* Law School (Law School complex – 3 buildings)
* College of Engineering (Engineering Building)

## Methodology

The Design Team suggests that the three (3) participating pilot colleges or schools be provided with a “not to exceed” utilities budget at the beginning of each fiscal year.

### Baseline

For FY 2012, FP&M will set a consumption baseline for the buildings participating in the pilot program. The baseline will be set using a three (3) year historical average for each of the five (5) major utilities servicing the building: gas, electric, water, chilled water, and steam. Theconsumption baseline within each building will be distributed based on square footage calculations and standard utility rates. The consumption average will be rolling as future budgets are developed. This initial baseline will serve as the “off the books” budget for FY 2012.

### Rate

Units are responsible for consumption based on a standard rate (per utility) that is proposed annually by FP&M based on their forecasting methodology. Rate discussions should begin on or around February 1st of each year in order to adequately prepare for the following year budget process. If the rate is different from the previous year, it should be considered by the Utility Advisory Committee and then approved by the Utility Executive Board before taking effect. *(See Section 3 for more information about the Utility Executive Board and Utility Advisory Committee).*

##### Rate Setting Process

**Step One:** The Director of FP&M’s Energy Management Department develops next year’s rate for each utility based on the following information:

**Step Two:** The Energy Management Department should present the forecasted rates to the Associate Vice President for Facilities Planning and Management for review and approval if any changes are made to the previous year’s rate.

**Step Three:** Once the proposed rate forecast has been reviewed and approved by the AVP, it should then be presented to the Utility Advisory Committee for discussion and their recommendation should be provided to the Utility Executive Board for final approval.

**Step Four:** Upon the UEB’s approval, the rates are officially set for the next fiscal year. As soon as possible, the Energy Management Department should provide the Office of Budget Planning and Analysis with a memo outlining these rates for inclusion in the annual budget preparation process.

**Step Five:** FP&M should publish the rates on its website immediately following the Utility Council’s approval and provide a memorandum explaining the same to the Deans and Business Managers of each participating school, college, unit, or department. FP&M should also keep at least the rates associated with the last fiscal year posted on its website for comparison and reference purposes.

### Assignment of Space

The portion each pilot college or school is responsible for is based on the percentage of net assignable square feet (NASF) it occupies in the participating building. The assignment of space is further determined by:

* NASF is calculated using the data contained within the University’s space management system (ARCHIBUS)
* Non-assignable space for each building is distributed to occupants based on the amount of NASF they occupy
* Any changes in NASF will be reflected in the upcoming year’s allocation; no changes will be made mid-year
* The NASF data as available within ARCHIBUS on the first Friday in February prior to the start of the new fiscal year budget will be the data used to set consumption baselines for the next fiscal year
* The utilities budget provided to each participant at the start of each fiscal year will be based on the following formula:

#### Surpluses and Deficits

The Design Team recognizes that units will have little incentive to conserve unless they are able to retain a significant portion of any budget surplus they achieve through responsible utility usage. Also, units will have little incentive to stay within their historical baseline unless they are required to cover a portion of their deficit. For these reasons, The Design Team recommends that units be allowed to keep 100% of any surplus, while requiring them to repay 100% of any deficit. This model is similar in scope to the universities benchmarked by the Design Team.

### Hold Harmless Period

The Design Team recommends that the three pilot units be held harmless for the remainder of FY 2012 and the entirety of FY2013 to allow for an adjustment phase for all parties involved. During this adjustment period, units will be allowed to accumulate surpluses, but will not be held liable for any deficits they incur.

## Surcharge

A surcharge should be applied to the standard utility rates. The surcharge will cover costs associated with administering the program and funding the proposed ECM Grant Fund. *(See Section 2.4.2 for information about the ECM Grant Program)*

### Operational Costs

A portion of the surcharge, referred to as the “recovery portion”, will be used to fund expenses related to program startup and on-going operations. The Design Team recommends that the recovery portion of the surcharge be allocated for the following purposes:

1. 100% of the salary and fringe for the following positions: Director of Energy Management, Assistant Director of Energy Management (proposed position), and a program Accountant (proposed position)
2. 50% of the salary and fringe for a Space Management Coordinator (proposed position)
3. Licensing and related costs for technology including energy management and analysis software and real-time energy monitoring equipment and systems

Total operational cost for FY 2013 is estimated to be in the range of $400K. (See Appendix item \_\_\_ for a cost breakdown).

### ECM Grant Program Fund

The Design Team proposes that a competitive grant fund be established to implement Energy Conservation Measures (ECMs) within participating units to assist them in achieving greater energy efficiency. ECMs are defined as any measure (product, component, or program) that substantially reduces energy consumption on campus or within an individual building or buildings. Common ECMs include, but are not limited to:

* Lighting retrofits
* Consolidating boilers and chillers into regional plants
* Implementing a robust marketing campaign to positively impact energy behavior
* Upgrading building systems and equipment
* Refitting restrooms with low flow water fixtures
* Automating building systems
* Providing consumers with real time access to energy usage
* Installing renewable energy technology
* Designing future facilities to be more energy efficient

#### Operating the Grant Program

The Design Team suggests that the following principles be used to govern the grant program:

* Any unit, department, college or school participating in the program can apply for funding
* FP&M can also apply, but the funding must be used for ECMs that directly impact participating unit(s)
* Up to half the cost of the proposed ECM can be funded through the grant program
* Any single award should not exceed $100K to allow for broad distribution of funding
* The application must provide sufficient engineering analysis to confirm the soundness of the project and the estimated financial returns the ECM will bring to the department (if the application is for project development funding, estimates can be provided in lieu of scientific analysis)
* The program should be overseen by the Utility Council who will be responsible for reviewing applications for their eligibility and merit and selecting applications that will be funded each year
* Units can, and are encouraged, to propose ECMs that benefit multiple or neighboring units (i.e. behavioral campaigns, constructing district boiler plants, etc.)
* All applications must be approved by the requesting department’s administrator or dean

#### Set Aside

Each year, the Utility Council should earmark a meaningful amount during the beginning stages of this program until it can reach the eventual goal of an annual set aside of $500K. The Design Team suggests that, to the greatest extent possible, the Council focus on expending the fund each fiscal year. The Design Team recommends the Council focus on earmarking funds for both project development (seed money) and construction costs (shovel ready):

* **Seed Money:** To the greatest extent possible, the Council should distribute 15% of the funding earmarked each year to support applicants seeking project development funding (i.e. engineering analysis, project design, etc.) Projects of this type should be “on track” to begin construction or implementation within three years of the grant award.
* **Shovel Ready:** To the greatest extent possible, the Council should distribute 85% of the earmarked funds to projects that are “shovel ready.” These are projects that can start implementation within six months of the award.

#### Considerations

The Design Team recognizes that the costs associated with the ECM Grant Program and additional staff amount to what is initially a “cost increase” to the University, but we believe the savings generated through the overall program will offset costs within a \_\_\_\_ year timeframe.

## Proposed Initial Rate

The Design Team recommends that an initial surcharge rate be set at \_\_\_\_ %.

### Annual Adjustments

The surchargerateshould be reviewed annually by FP&M in consultation with the Utility Advisory Committee. Any adjustments made to the surcharge rate should be formally approved by the Utility Advisory Board, and participating units should be notified of any changes in the rate before thy take effect. Supporting Behavioral Changes

## Gathering Feedback

# Auxiliary Units

Currently, FP&M provides analysis and billing support to Auxiliary units. These services are currently provided “in-kind” by FP&M. The Design Team recommends that auxiliary units be subject to the same rates and operational surcharges as the pilot units starting with the FY 2013 budget cycle. The Design Team does not recommend that auxiliary units be subject to the ECM Grant Fund Program surcharge since they are not eligible to participate in this program…

# Program Governance

To ensure fairness and transparency, there should be a body established known as the Utilities Executive Board (UEB or “Executive Board”). The Board should be responsible for overseeing the program. An advisory committee, known as the Utilities Advisory Committee (UAC or “Committee”) should also be established to assist the Board with carrying out its responsibilities.

## The Utilities Advisory Committee

The Utilities Advisory Committee should serve in an advisory capacity to the Utilities Executive Board; the Advisory Committee should hold no authority to make binding decisions without the approval of the Executive Board.

All matters related to the operation of the Utilities Budgeting Program should be vetted and reviewed by this committee before moving to the Executive Board for final approval *(see Appendix 8.1 for sample issue flow).*

### Responsibilities

The Committee should be responsible for carrying out the following duties:

* **Hearing disputes:** Consider disputes that arise related to the operation of the program, review the validity of such disputes, determine the most practical way to rectify the issue if one is found to exist, and recommend to the Executive Board whether it should accept or reject the appeal.
* **Vetting rate changes:** Consider any changes in utility rates proposed by FP&M and recommend to the Executive Board whether it should accept or reject the rate change.
* **Analyzing utility budgets:** Analyze the participating unit’s utility budgets to ensure accuracy of the space and consumption data used and recommend to the Executive Board whether it should accept or reject the proposed budgets.
* **Reviewing usage data:** Review performance data for the participating buildings on an annual basis; direct appropriate staff to investigate any anomalies and report back to the Committee with their findings and any suggestions on how to remedy any problems
* **Reviewing ECM Grant applications:** Review ECM grant applications and submit worthy proposals and recommended award amounts to the Executive Board for their consideration and ultimate approval (see Section \_\_\_\_ for more information on the ECM Grant Program)
* **Proposing adjustments to the surcharge rate:** If the need arises to adjust the surcharge rate to a lower or higher level, the Committee should recommend a more appropriate rate to the Executive Board and include a compelling justification for why such an adjustment is necessary
* **Other responsibilities as assigned by the Executive Board**

### Authority

Decisions made by the Advisory Committee are considered to be “recommendations” only and are not binding. Any recommendation submitted to the Executive Board should be based on a majority vote. Members are welcome to provide the Executive Board with a “minority opinion” to accompany any recommendation not receiving a unanimous vote.

### Membership

The Utility Advisory Committee’s membership should consist of eight (8) total members: four (4) permanent members and three (3) rotating members as outlined below:

### Permanent Members

Permanent members are members of the Advisory Committee by virtue of their role within the University. Permanent members should include:

1. Associate Vice President for Facilities Planning and Management
2. Director of Utilities and Energy Management, Facilities Planning and Management (Chair)
3. Director of Business Services, Facilities Planning and Management
4. Senior Director, Office of Budget Planning and Analysis

### Rotating Members

Rotating members serve two (2) year terms (based on the fiscal year) and can serve no more than two (2) consecutive terms. Rotating members possess the same rights and voting privileges as permanent members. Rotating members should include:

1. A Dean of a participating college or school (appointed by the Provost)
2. A Director of a participating auxiliary unit or department (appointed by the AVP for Business and Auxiliary Operations)
3. A Business Manager of a participating college or school (appointed by \_\_\_\_)

### Meeting Frequency

The Advisory Committee should meet at least four times each year to ensure that disputes, ECM allocations, etc. are handled in an efficient and responsible manner.

## The Utilities Executive Board

The Utilities Executive Board should be responsible for the overall operation of the program. The Executive Board should consider the recommendations made by the Advisory Council when exercising its “final approval” authority.

### Responsibilities

The Executive Board is responsible for carrying out the following duties:

* Considering recommendations made to it by the Utility Advisory Committee and voting to accept or reject those recommendations
* Ensuring that the funds collected through program surcharges are used fairly and efficiently

### Authority

Decisions made by the executive board should be based upon a majority vote (done in person or by proxy) and decisions reached should be considered final and binding. If the Board rejects an item of criticality to the continued operation of the program (i.e. a rate increase, budget proposal, etc.) conditional approval should be granted so that the issue can be rectified without returning to the Executive Board for additional approval, or at the very least, justification should be provided to staff so that the issue can be expediently rectified and return to the Executive Board for approval by proxy.

### Membership

The membership of the Executive Board shall be comprised of (3) three members, who are appointed to serve by virtue of their positions within the University administration. These positions should include:

1. Senior Vice President for Academic Affairs and Provost
2. Vice President of Finance and Business Operations (Chair)
3. Associate Vice President for Budget Planning and Analysis

### Meeting Frequency

The Executive Board should meet at least four times each year to ensure that disputes, approvals, etc. are handled in an efficient and responsible manner.

## Staff Support

Staff should be designated to assist the Advisory Committee and the Executive Board in carrying out its business. In many instances, staff support will include members of the Advisory Committee by virtue of their expertise in related matters and their roles within the University.

## Conflicts of Interest

For the sake of impartiality, if a matter comes before the Advisory Committee or Executive Board that involves a member’s own unit, he or she should recuse himself/herself from participating in any discussions or votes held on the matter. If a member must recuse himself/herself and the Chair determines that a replacement is necessary to carry out the Council’s duties, another qualified individual can be appointed serve in an interim capacity.

# Appendices

## Sample issue flow using the proposed governance model

## FY 2012 energy intensity and cost data for pilot buildings

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Nursing (Cohn)** | **Law (Law Complex)** | **Engineering** |
| **Energy Intensity** |  |  |  |
| **Energy Cost** |  |  |  |

## FY2012 baseline data for pilot colleges/schools

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Nursing (Cohn)** | **Law (Law Complex)** | **Engineering** |
| **FY12**  **Baseline** |  |  |  |

## FY2012 consumption to date per unit of energy

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Nursing (Cohn)** | **Law (Law Complex)** | **Engineering** |
| **Natural Gas** |  |  |  |
| **Electricity** |  |  |  |
| **Steam** |  |  |  |
| **Water & Sewarage** |  |  |  |
| **Chilled Water** |  |  |  |

## FY2012 proposed surcharge rates for pilot colleges/schools

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Nursing (Cohn)** | **Law (Law Complex)** | **Engineering** |
| **Operational Cost** |  |  |  |
| **ECM Program** |  |  |  |

## FY2012/FY2013 proposed standard rates per unit

|  |  |  |
| --- | --- | --- |
|  | **FY2012** | **FY2013** |
| **Natural Gas** |  |  |
| **Electricity** |  |  |
| **Steam** |  |  |
| **Chilled Water** |  |  |
| **Water/Sewerage** |  |  |

## Sample educational literature

Iowa State University and Stanford University has provided program participants with various educational tools, including the two white papers accessible through the links below, to provide energy reduction tips to building occupants.

<http://lbre.stanford.edu/sem/ECIP>

<http://www.fpm.iastate.edu/utilities/energyefficiency/typ_equip.asp>

## Benchmarking results

The Design Team contacted four universities that are operating similar programs to collect best practices that would assist the team with developing WSU’s methodology.

|  | **Emory**  **University** | **University of Michigan** | **Iowa State University** | **Stanford University** |
| --- | --- | --- | --- | --- |
| **Do you base your utility rate on each utility type (water, gas, etc.)?** | Yes | Yes | Yes | Allocate electrical costs because of 2001 California energy crisis. |
| **How did you handle departments that are funded 100% from grants? (F&A impact)** |  | Does not matter | Treated the same | Treated the same |
| **How do you calculate utility rates?** | Usage times internal rate - calculated 18 months in advanced. | Use 3 Yr consumption - do not use weather variation. Year-end adjustment done - ties to penny. Cost are based on projected consumption. | Establish utility rates at the beginning of each fiscal year. Preliminary rate in October for the following year and adjusted sometime in January or February. | Developed a kilowatt budget and uses a flat rate to charge electricity. |
| **Do you offer incentives to units to curtail energy costs? If so, what base year are you using? What can they use their savings for?** | Yes, if consumption goes down by school or college, savings used however they want. | Yes, and can use for discretionary purposes. Used 1998 base year. | Yes, each school/college develop their budget (budgets are not held centrally). They pay for all services. | Yes and any savings can be used for discretionary purposes. Base year was 2003 and has not changed since then. Because of new technology, the original model probably needs to be revised. |
| **Does your university allocate costs for all areas?** |  | Only charge revenue producing or activity base areas such as auxiliaries and schools and colleges. Budget for non-revenue units are covered centrally - Provost. | Yes, in the 3rd year of a full RRM model. | No, implemented academic four which consist of more than several 100 buildings. |
| **What allocation methodology do you use for shared metering, common space, non-utilize space, etc. ?** | Square Footage - based on departments occupying space | Net assignable square footage | Net assignable square footage. Provost holds the budget for general classroom space. | Square footage - divide common space in proportion to usage - same outcome if you excluded the common space (i.e., simplifies the allocation). |
| **Do you include other overhead costs that support facilities utilities and energy management unit in your utility rate? If so, which ones?** | Yes - support staff of utility company & debt service | Administrative charge to cover utility enterprise (salary and benefits) and long term maintenance costs for water and sewer. Recapture all utility service enterprise (plant operation costs) - 2% to 3%). Planet Blue is funded centrally. | Units project their budget. If they save money, the balance stays in their budget. | Created a utility company and incorporated the overhead in the recharge rate. |
| **Do you allocate all facility overhead costs (define by A-21) to units?** | Yes | No | Yes | No |
| **What risk are units expose to (changes in usage and changes in rate)?** | School bears the usage risk; utility company bears the rate risk | Building is assigned to unit and is access the full utility costs. | Risks are usage and rate changes. | Usage only. |
| **Do you allocate an amount to fund infrastructure (reserves) and if so, what do you set aside?** | Yes, $1.4 million for infrastructure |  | If a school or college makes money, it goes into a reserve. Reserves help fund any overage. | Capital improvements - all customers share the costs. Energy retrofits are added to rate. Adjust budgets when there is a whole energy retrofit for a building. Larger capital projects are funded with bonds. |
| **How do you handle new buildings?** |  | New buildings are supported for 3 years centrally. | Request funds to be added to their operating costs for new buildings. | New buildings are funded for one year except for lab buildings that are funded for three years. After that time baseline is set. |
| **What type of utility allocation documentation do you send to the units?** | Monthly spreadsheets on actual usage, calculation of budget | Provide more than utility - they provide activity base report by items such as financial aid, utility costs, university tax, and revenue items. | Dashboard provides utility consumption by building for three years. |  |
| **How long ago did you implement utility allocation to units?** | 2005/2006 | 2002/2003 | Started 1986 for utility costs only. | 2002 |
| **Did you implement a pilot program/selected areas/buildings? If so, how did the pilot group get selected?** | No | No | No | Yes - see above |
| **How long did it take to implement utility project (pilot program if applicable or all units)?** | 3 to 4 years | No answer |  | Pilot period of 6 months |
| **Did you align this project with energy conservation activities?** | Yes, either funded by s/c or plant fund | Planet Blue Project came later |  | This was consider an energy conservation incentive program because end users were dictating or were accountable for their energy use. |
| **Who was involved in the project management team?** |  | Initial group was FP&M, Budget, Financial Analysis |  |  |
| **Did you get outside consultants to assist in the implementation of the utility project?** |  | No |  | No |
| **What downfalls did you experience during implementation?** |  |  |  | Crisis mode of operation. |
| **How did you communicate this change to units?** | Got buyin by making all calculations very transparent | Wil worked in Social Work at the time. He said that units accepted the change. |  | Provost was behind change. |
| **How did your university develop an initial rate and base usage?** |  | Units budgets were restated as an activity base budget with comparison of their original incremental base budget. | This university goes beyond utility allocation. | Developed kilowatts rates, consumption based on 5 year historical trend. Then budget was allocated at high level. Deans have the flexibility of allocating to their departments. |
| **Can you share you project work plan?** |  | N/A | N/A | N/A |
| **Systems: Energy, Space, and Accounting** | Asset Work - Work Management System | Space system is extremely detail. Utility costs are track by building. | Energy system is integrated into Famous which is tied into the billing program. This system also includes space data. | Uses a space information database. Needs a more robust tool for managing allocation. The utility system is a homegrown system and are looking into replacing. |
| **Did you utilize any other systems - external or in-house?** | No |  | No | See above |
| **What were the software requirements?** |  |  | N/A |  |
| **How many people support the facilities utilities and energy management unit?** | 2 support staff |  |  |  |
| **What changes or best practices occurred after implementation?** |  | Model was simple and equitable so no changes occurred |  | One major complaint has been to heavy IT related use. Overtime, had to add increase usage because of this. |
| **What would you of change or done differently during implementation?** |  | None |  | Need a more robust system for managing utility allocation. |
| **Do you have post committees?** |  | Yes, Utility Studying group and Rate Setting Board | Yes, Budget Advisory Group that approve the final utility rates. | Yes - Advisory Board. There is an appeal process where the budget office has to approve or denied. |
| **How often to provide utility reports to units?** |  | Quarterly | Dashboard available | Monthly reports are provided in detail and summary and will share . |