

Construction Audit Process Progress Report

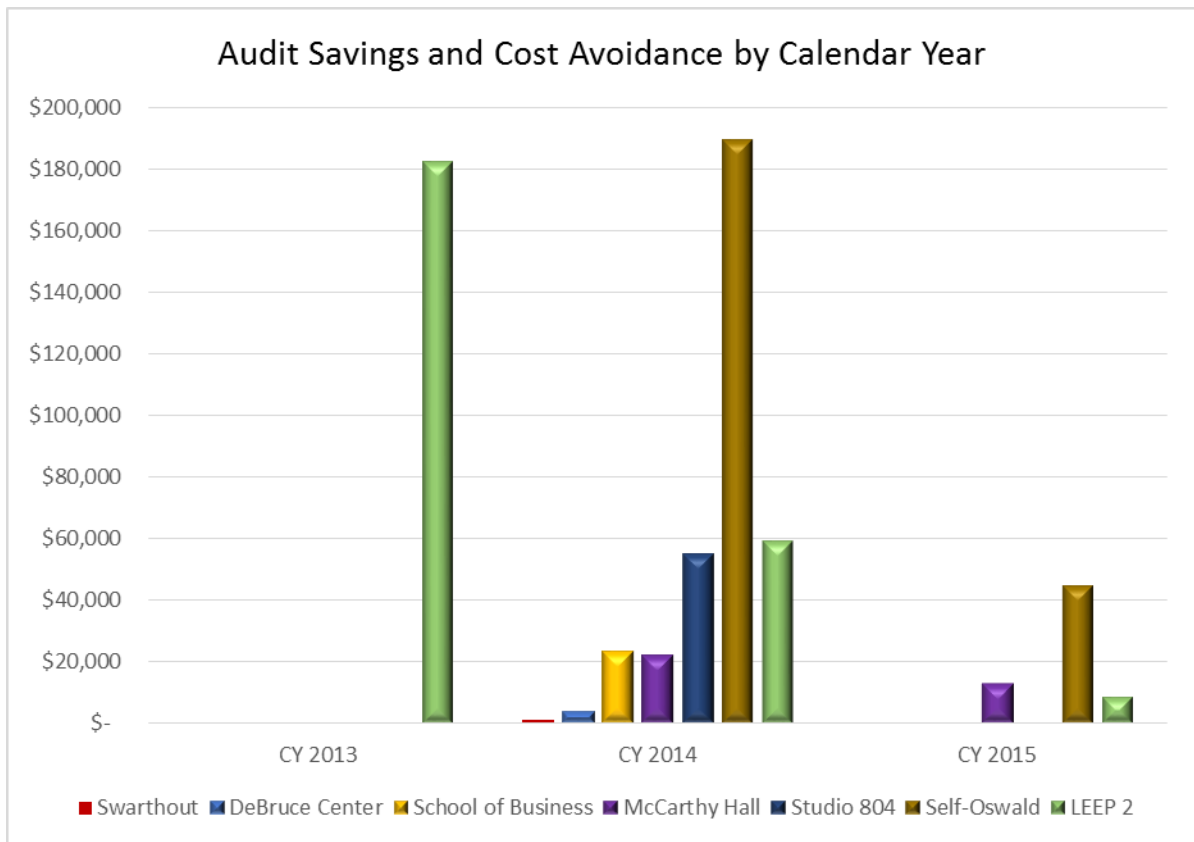
Introduction

Changing for Excellence recommended that KU implement construction auditing to recover or avoid costs. The original goal was to “embed audit language in all future construction contracts and engage a professional construction audit group to enhance due diligence and financial control.”

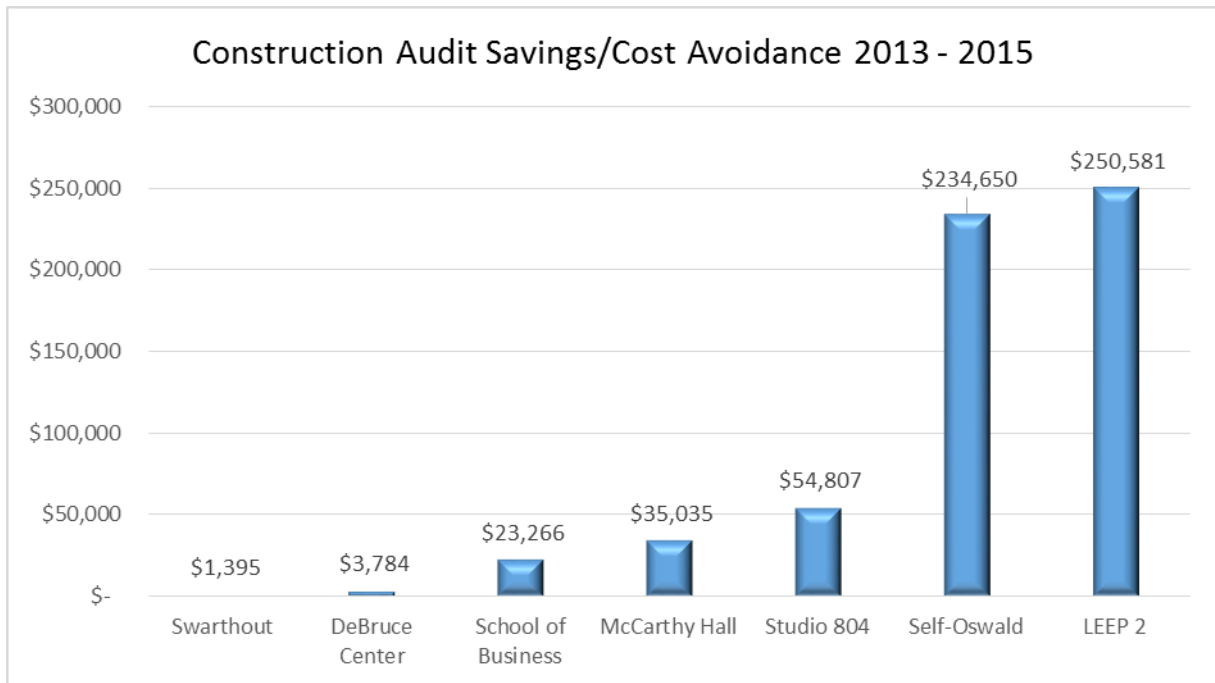
Snapshot

Capital project audits were implemented in July, 2013 beginning with LEEP 2. Five projects have been completed; another six projects are in the audit process.

LEEP 2 was the only project audited in 2013, with savings of \$182,533. In 2014, seven projects were audited, with \$354,528 in savings. In 2015, savings are currently \$66,457 with a number of fall 2015 pay applications currently under review.



Total construction audit savings and cost avoidance since 2013 are \$603,518.



Background

The initial construction audit plan envisioned using an outside firm to provide audit services, using information supplied by KU. A firm was recommended by Huron, a number of investigatory meetings were held, and the recommended firm did a mini-audit of a construction project currently in progress. At the conclusion of that process a decision was made to perform audits in-house, rather than using an outside firm.

An extensive effort was then undertaken to design an audit process that would be efficient and effective. Items researched included:

- Software options to increase audit efficiency
- Language needed for construction contracts
- Reasonable percentages to be charged for insurance and bond expense
- The appropriate minimum threshold for mandatory audits
- Process design that would maximize the effectiveness of audits without compromising the efficiency of KU construction project management

Solution

The process developed contained a number of components.

1. All capital projects with a budget of \$1,000,000 or higher would be automatically audited. Projects less than \$1,000,000 could be audited, based on unique circumstances.
2. The project auditor would drive the process, with input as needed from the DCM project manager.
3. Contracts and contract amendments would be reviewed by the auditor prior to signing.
4. Pay Applications would be audited monthly, not at project completed.
5. An Image Now process was designed for a first scan of invoices, looking for key terms such as tax and food. This step was ultimately eliminated from the process because it did not improve audit efficiency.
6. Audit guidelines were written and posted on the DCM website.

Results

Projects audited to date include:

Completed audits:

Jayhawk Boulevard, Phase 2

Contract Type: *Fixed Price* Contract: \$2,367,014 Audit Savings/Avoidance: \$0

Jayhawk Boulevard, Phase 3

Contract Type: *Fixed Price* Contract: \$2,839,045 Audit Savings/Avoidance: \$0

LEEP 2

Contract Type: *CM at Risk* Contract: \$66,627,169 Audit Savings/Avoidance: \$250,581

Studio 804

Contract Type: *Design Build* Contract: \$1,468,263 Audit Savings/Avoidance: \$54,807

Swarthout

Contract Type: *CM at Risk* Contract: \$1,310,740 Audit Savings/Avoidance: \$1,395

Audits in Process:

DeBruce

Contract Type: *CM at Risk* Contract: \$15,932,570 Audit Savings/Avoidance: \$3,784

EEEC

Contract Type: *CM at Risk* Contract: \$65,000,000 Audit Savings/Avoidance: \$0

McCarthy Hall

Contract Type: *CM at Risk* Contract: \$10,290,103 Audit Savings/Avoidance: \$35,035

School of Business

Contract Type: *CM at Risk*

Contract: \$52,717,988 Audit Savings/Avoidance: \$23,266

Self-Oswald

Contract Type: *CM at Risk*

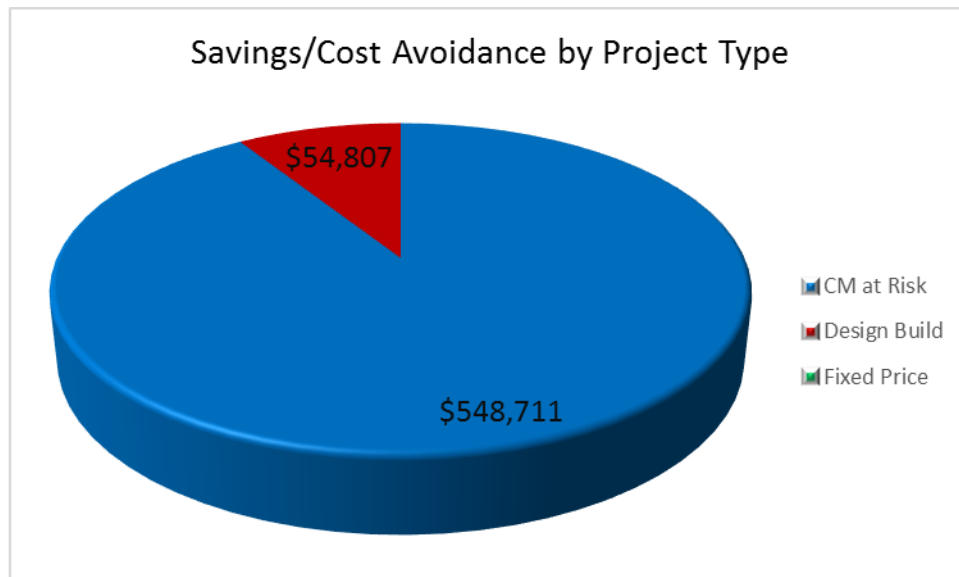
Contract: \$42,969,259 Audit Savings/Avoidance: \$234,650

Spencer Museum of Art

Contract Type: *CM at Risk*

Contract: \$5,239,926 Audit Savings/Avoidance: \$0

Projects audited fell into three different categories: CM at Risk, Design Build, and Fixed Price contracts. CM at Risk contracts were used for the largest projects during 2013, 2014, and 2015. A Design Build contract was used for only the Studio 804 project, and Fixed Price contracts were used for Jayhawk Boulevard Phase 2 and 3. No audit savings were realized on the two Fixed Price contract projects. \$54,807 was saved on the Design Building project and \$548,711 was saved on the CM at Risk projects.



The percentage of savings/cost avoidance compared to construction contract amount was highest in the CM at Risk category at .43%. The Design Build project audited had .34% audit savings/cost avoidance.

Audit savings have resulted from a number of categories. The most common savings have resulted from math errors in invoices submitted for payment and items submitted for payment that are not allowed under the project's contract. Examples of inappropriate charges include entertainment/hospitality charges, service charges on leased vehicles, labor charges for holidays and

vacation days, and late payment charges. Math errors have included incorrect labor rates, incorrect insurance and bond rates, as well as simple calculation errors.

Conclusion

Construction auditing of CM at Risk and Design Build projects has resulted in significant savings for the university, \$603,518 to date.

DCM project managers report that the audit process has a minimal time commitment on their part and reassures them that pay applications are closely monitored. Contractors initially expressed concern that the audit process would involve a significant time commitment, but have generally been very cooperative and not found the process to be burdensome.

Overall, construction auditing has been and will continue to provide substantial benefit to the university.