Introduction

Institutional support is among the second largest expense category at public and private institutionsthe largest being instruction, including faculty salary and benefits.¹ Institutional support is an umbrella term for day-to-day operational support that includes various general administrative services, inclusive of space management. It is a substantial piece used in developing the Facility and Administrative (F&A) Cost Rate required by the Federal Government. Providing space management data in the form of space inventory and square footage by school, department and function is a critical requirement.

However, obtaining space management data can be an elusive and time consuming process.

"The data is of great importance to many groups on campus. Much of the analysis of space is for internal use. For example, the School of Medicine (a formula school) uses the data in their annual budgeting process and in space planning. And, of course, EH&S, PMO, and many others depend on the accuracy of the data in accomplishing their work.

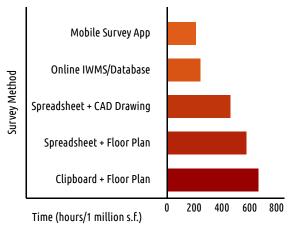
Perhaps, more importantly, the data supports negotiations with the Federal Government of the Indirect Cost Rate that is applied to sponsored projects. A large portion of the indirect cost recovered by the University depends on the Space Inventory. The Cost and Management Analysis group (CMA) utilizes the room level functional use data in the allocation of building related costs that will impact the recovery of millions of dollars to Stanford University."

Stanford University

2. The Challenges of Obtaining Accurate and Timely Space Data

Space surveys and audits are labor intensive. Traditional data collection methods indicate surveys can be completed at a rate of approximately 1500 sf per hour, including transcribing updates and

preparing reports. Annual surveys for medium sized portfolios (2.7 million square feet) can take up to 1 year for a full-time resource to complete.² However, public sector organizations do not typically fund a dedicated resource for this activity and so; space surveys are done on an as-needed basis or when and if there are known changes to the makeup of the facilities portfolio.



1 "Expenses of Postsecondary Institutions," National Center for Education Statistics, http://nces.ed.gov/programs/coe/indicator_cue.asp, (May 2014)

2 Source: FieldFLEX independent study

automation -

Clipboard: Pen and Paper	Offline: Spreadsheet and Hardcopy Floor Plans	Offline: Spreadsheet and CAD Plans	Online: Connected IWMS and CAD Applications:	Mobile: On/Offline Mobile Survey Applications
A simple inventory & verification method using printed lists. Collected data are manually updated in master spreadsheet or database. Any physical space changes are picked up during inventory and are noted on hardcopy drawings and updated in CAD drawings afterward.	Replaces the clipboard with a spreadsheet. Surveyors take a laptop with a spreadsheet and update the information on- site. Data updates can be imported into a master spreadsheet or database once validated. CAD updates are done separately (post- survey).	Similar to previous method, however, CAD drawings are updated on-site during the survey.	Utilizing in-building wireless network coverage, surveyors can connect to facilities management database applications to update data and drawings on-site.	True Mobility. Tablets and/or smartphones with survey applications can be deployed and used anywhere anytime. Drawing mark-ups can be sent to CAD team for updating. Space data changes are transmitted to the database in real- time. In case of connectivity loss, the mobile software will let the user continue to work offline and update data when connectivity is restored.

3. The Risk of Bad Space Data

In the case of using traditional data capturing methods, the potential for contrived, duplicate and, missing information is higher than any other method, leading to the greatest potential for reporting errors across the board. In turn, these errors manifest themselves in issues related to submissions for grants or from other funding sources. The greatest being the submission of incomplete or inaccurate data for use in developing an appropriate F&A rate or cost recovery. Moreover, the difficulty in occupancy planning arises with incomplete or inaccurate data leading to additional costs.

0%

100%

4. How to Minimize the Risk of Bad Space Data

There are proven techniques to reduce overall time spent collecting, collating, analyzing and reporting space data in your portfolio.

Transition away from Traditional Methods. If your organization has not already defined a mobile strategy to maximize opportunities and efficiencies, begin to develop that strategy and make sure to keep in mind the following³:

Define mobile requirements as you would with any enterprise system. You will need to consider many things prior to implementing a mobile solution. First, what business processes will you target for mobility? Second, do you have a target for reducing consumption (i.e. paper, fuel, greenhouse gas emissions) and if so, what is the timeline? Do you have a productivity target? Additionally, will the mobile solution following an existing business process or will utilizing a mobile application require re-engineering?

How to Capture Data Accurately and Timely Using Mobile Applications?

A direct correlation between the use of mobile applications used for gathering and updating data in the field and reduced survey time, reduced post-survey data updates and, improved data quality has been established in our study.

1. Reduce survey time

Performing space survey using mobile devices = efficiency. We measured several surveys utilizing all methods and found mobile surveys can reduce survey times by up to 50% or an increased rate of up to 3,000 sf per hour.

2. Reduce post-survey data updates

By transmitting data updates directly to a host database, after the fact data updates are virtually eliminated

3. Improve data quality

Mobile applications use structured input forms with built-in pick lists to ensure data is recorded accurately. Can your clipboard survey methods do the same?

4. Improve visibility and timeliness

Mobile survey applications can offer some assurances that space data is up-todate and accurate at any point in time. As data are captured in the field, data can be instantly available for reporting, analysis and planning using database applications or enterprise workplace management systems.

³ Please contact a FieldFLEX representative for more information on consulting and delivery of enterprise mobile solutions.

5. FieldFLEX Facility Survey Application

An intuitive mobile application for conducting mobile space surveys can be instrumental in improving data quality and reduced survey times and updates. The FieldFLEX Facility & Asset Survey mobile forms and interactive floor maps to locate and update information empowers your organization to further streamline activities and to ensure that you are collecting data in the most efficient way.

This native smartphone and tablet application allows your field technicians to:

- •Connect to your enterprise host database in real-time
- •Utilize purpose built forms with built-in pick lists
- •Upload images taken directly from smartphone or tablet







About FieldFLEX

To learn more about the FieldFLEX mobile platform, signup for a demo or learn more about our consulting and delivery of mobile solutions, visit <u>www.fieldflex.com</u>.