

Cornell University, Kimball Hall Renovation

PAYETTE

# **METHODOLOGY**

One of the most important aspects of our practice is to follow-up with those who work and learn in the buildings we design, not only when the buildings are first occupied, but also over the life span of the building. The Post Occupancy Evaluation (POE) is the vehicle Payette uses to obtain this valuable feedback. Multiple sources of information, from researchers, facilities management, administration, faculty and staff are included.

The scope and focus of each POE is tailored to the specific goals and attributes of the project including:

- Has the design supported the organization's/institution's goals for the project?
- Are the occupants using the spaces as intended?
- Has the design supported the learning or research experience?
- Are the occupants maximizing the benefits of the building systems?
- What informs future design and contributes to social engagement on campus?

The POE is performed in several steps:

- Building Tour: On-site observations
- Interviews: In-person interviews with building users: faculty, staff, University administration and building management.
- Survey: Online surveys for faculty, staff and facilities staff. Often the surveys are tailored to each group.

The information in this report reflects the opinions of building users, and does not represent the views of Payette. Any field observations and follow-ups with vendors and engineers conducted by Payette are noted. All charts in this report have been created from survey data. Quotations are from the survey and in-person interviews, and represent the opinions of many individuals.

A note about percentages: Not all questions were answered by each respondent. The survey is designed so that respondents could skip questions that do not apply to them. Percentages shown for each question are based on the number of respondents that provided an answer to that particular question.



Survey Responses from Faculty, Researchers and Administration. The survey ran for two weeks in January 2019; Interviews: September 2018

#### PROJECT LOCATION

Ithaca. New York

# **DATE OF COMPLETION**

2015

### **TOTAL SQUARE FOOTAGE**

19.380 GSF

### **CONSTRUCTION COST**

\$8.5M

### **CLIENT CONTACT**

Thomas King, Director Facilities, 607-255-7216

#### **DESIGN TEAM AND CONSULTANTS**

Payette, Prime Architect M/E Engineering, MEP Engineer Simpson Gumpertz & Heger, Structural Engineer

### **POE TEAM**

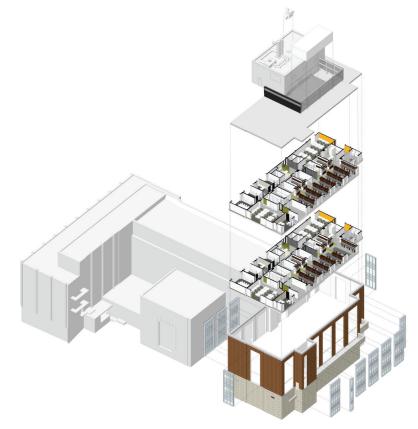
This Post Occupancy Evaluation is a joint effort between Cornell and Payette. Individuals from Payette who did not work on the design of the project led the interview sessions.

# Special thanks to Thomas King for facilitating this POE

# **INTRODUCTION**

Cornell's College of Engineering sought a prototype renovation that would demonstrate the potential of its mid-century teaching labs to meet the next generation of interdisciplinary research needs. Originally built in 1952 with an open plan, Kimball Hall had been compartmentalized over the years into a series of small, isolated rooms, largely devoid of natural light. This layout discouraged interaction among faculty and students of the College's dozen-plus programs, and it failed to accommodate new occupants and research types.

"Generally, users love the labs and office spaces. **People from other buildings are 'jealous'** of Kimball space."



NEW LABORATORY MECHANICAL SYSTEM AND SOLAR WALL

LEVEL 2 AND 3: GUT RENOVATION FOR INTERDISCIPLINARY WET BENCH ENGINEERING RESEARCH

LEVEL 1: SHARED FACILITIES REMAIN OCCUPIED DURING CONSTRUCTION

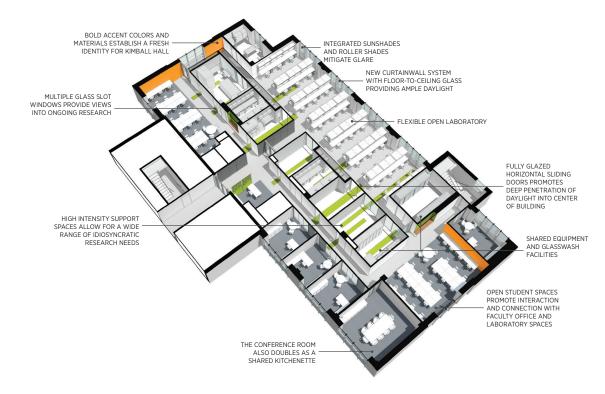
NEW EXTERIOR ENVELOPE:
INSULATION
NEW HIGH PERFORMANCE CURTAINWALL
WITH INTEGRATED STINSHADES



INSPIRING INTEGRATION The renovation creates an open, flexible suite of visually connected spaces to accommodate a wide range of disciplinary needs. It weaves together layered work areas, distinguished by their levels of energy use. Energy-intensive, specialized spaces supporting an open, flexible research lab combine with low energy use offices and student workspaces to form an integrated and cohesive research neighborhood.

The design encourages collaboration and provides opportunities for new scientific relationships among the engineering departments. Taking advantage of the building's long structural spans, the open lab features a simple, adaptable infrastructure system that can accommodate a range of uses.

The character of the renewed spaces further enlivens the experience. Daylight floods the building's bright interiors, streaming through expanded windows. Sliding glass doors and slot windows carry the sense of openness and transparency into the support zone. Bold materials and accent colors introduce a playful energy.



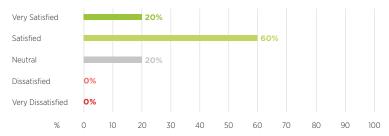


# **OVERALL**

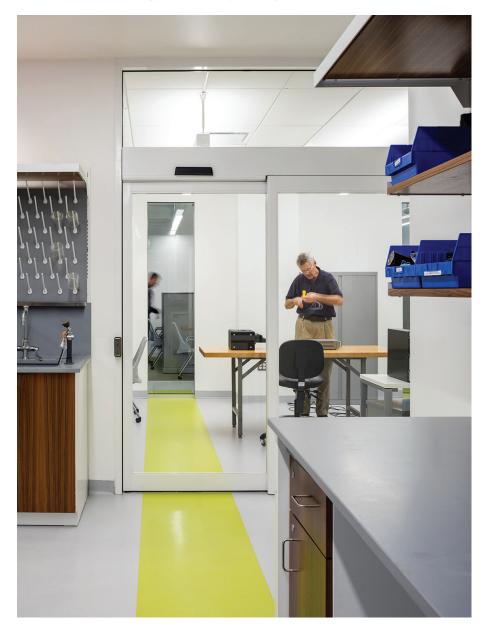
Over **80%** of the survey respondents are **satisfied** with the building. Most of the comments focused on the amount of windows and natural light.

The faculty we interviewed really appreciated having their work space and offices near each other. The vast majority of survey comments praised the natural light throughout the building. The majority of the negative comments in both the survey and interviews focused on the combined conference room and kitchenette, the need for more storage space and temperature control.

Overall Experience: Level of Satisfaction



"It is **bright** and lifts my mood."



# **INSIGHTS FROM BUILDING USERS**

# **OVERALL BUILDING**

- Big windows, lots of whiteboards, personal desk space
- The colors are bright
- Visually it is bright and appealing with big windows in the lab area
- The conference room wall-to-wall whiteboards

80%

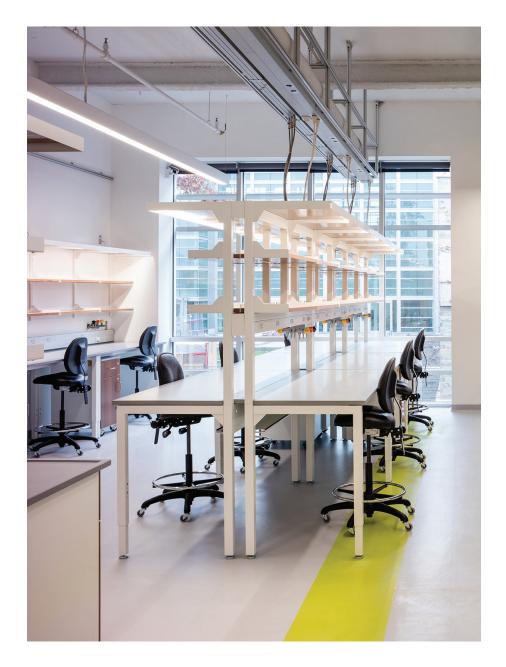
of survey respondents enjoy working in Kimball

**73%** 

of survey respondents feel that the renovation enhances their work effectiveness, both individually and with others

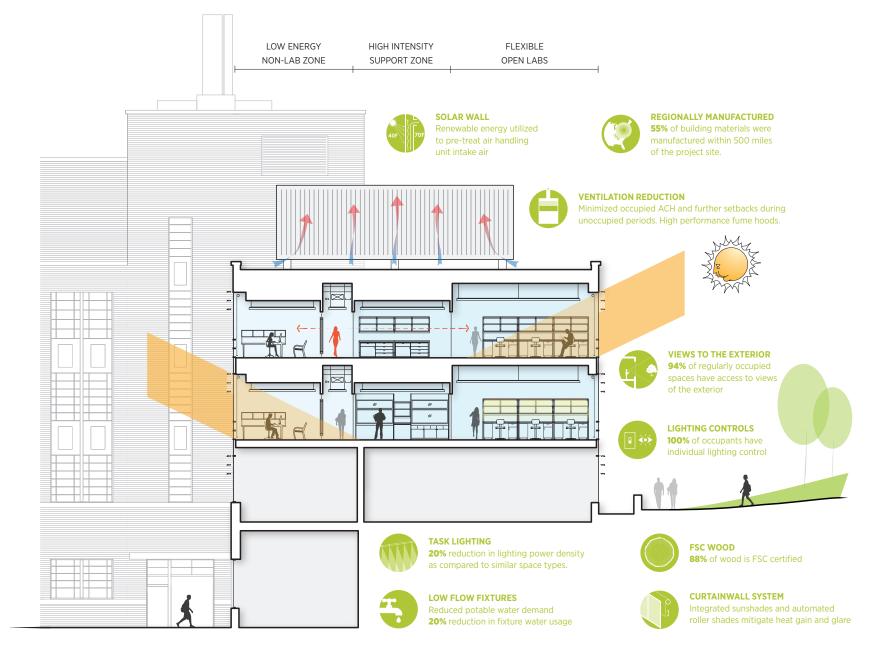
**67%** 

of survey respondents find the renovation visually appealing



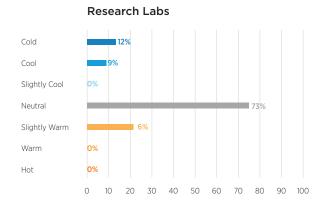
# **SUSTAINABILITY**

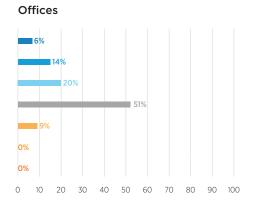
# **LEED GOLD CERTIFIED**



# THERMAL COMFORT

During the design of this building, our team analyzed the design of the new curtainwall areas to minimize harmful solar radiation and glare. This resulted in a new high performance curtainwall with sunshades and internal blinds. The following represents the users' opinions about how comfortable the temperature is in various parts of the building.





Depending on the room, most users are satisfied (neutral) with the thermal environment. Of the individuals surveyed, the conference rooms and offices are where they feel the coolest.

# **RESEARCH LABORATORIES**

# **INSIGHTS FROM BUILDING USERS**

### LAB FLEXIBILITY

- I like the flexibility however the space is limited
- We can't change the lab space easily to accommodate new equipment.

### LAB TO OFFICE RELATIONSHIP

- Good communication between supervisors and students. Lab-to-office relationship is good.
- Promotes ease of interaction with others

### LIGHTING

- Light in open lab area is great, but not good for light sensitive work. Would prefer to be able to turn off one bay of lights or close one bay of shades at a time.
- Task lights are good. Lower buttons can be bumped, but higher ones are hard to reach for some people.
   Would be nice to be coordinated with switch (switch turned it off, but not on)

### LAB WRITE-UP AREAS

- Generally well liked.
- Desk spacing seems tight.
- Whiteboards are great for group meetings; laying out experiment design.
- Soft seating is not highly utilized. Tend to collect items like magazines and electronics.
- Would like more outlets and Ethernet at every desk.

### STORAGE

- · Would like more storage in the labs.
- Need additional space (eg. counter space) for equipment



# OFFICES, WORKSPACES, COLLABORATION SPACES & CONFERENCE ROOMS

# **INSIGHTS FROM BUILDING USERS**

### **OFFICES**

- My office allows me to instruct or train individuals, consult with researchers, process data and write.
- Like the separation of office space from research space
- Close distance between work area and office
- It is often cold in the office and conference room areas

#### CONFERENCE ROOMS

 The conference room is on the smaller side for the labs that use the space. Since it's the only conference room available in the building we make it work, but it's a bit cramped.

### KITCHENETTE

- Kitchenette would be better as separate space. People cannot access lunches during closed-door meetings.
- Sometimes we put the microwave in the hallway so it is accessible.
- Carpet in kitchen area is stained from spills.
- Counter flush with cabinet front leads to spills on cabinet face causing damage to the wood finish.

### **COLLABORATION SPACES**

- There are very few areas to have a private conversation with someone who needs help with their work, particularly if a flat surface is needed.
- There is no good place to talk to people if the conference room is in use already, which it generally is
- Because of the small aisles, when people come to talk to my desk neighbor they are basically hovering around me too. It is also a struggle to get past a group of people talking.



# **CONCLUSION: KEY INSIGHTS**

# **INSIGHTS FROM BUILDING USERS**

- A cultural shift has to occur to make facility run well.
   It would be helpful to have a process for new student orientation (explain 1:1 write-up to lab bench, rationale of sharing, etc.) as this style of lab is new for many researchers.
- Sharing/collaborative/efficiency concept works well on the 3rd floor where they are all bio-centric. Small space, but high net use. Efforts were made to put new culture of sharing in place; otherwise would not work as well. Sharing is more difficult for users on the 2nd floor with different/non-related research; feels somewhat mismatched.
- Confusion over cultural/administrative divide between what is a conference room (schedule-able College resource) and what is a break room (common lounge area for eating lunch and casual conversations).
- Floor-to-ceiling glass is nice, but equipment, waste receptacles, etc. get put against it eventually. Storage or blank wall is more useful.
- Light gray epoxy on lab benches shows scratches and marks. Light colored floors show the dirt and are hard to clean, showing a little wear and tear (staining and scuffs). Stains around cylinder closets due to dragging cylinders. Dirtier looking in specialty rooms (like TC) because cleaning crew has less access
- "Excellent view" of campus is "wasted" in a side lab corridor, instead of conference room or office.
- Sliding doors are working well. Users like variety of functions, such as hold open. Have used swing-out feature for equipment moves.
- The air and ambient noise around the lab (both office and research space) is pretty loud and many wear noise cancelling headphones.
- Lab Bench tables are subject to wiggling/vibration

