

we thank you for your participation

PEER REVIEW WORKSHOP #1

ADVANCED ENERGY EFFICIENT BUILDING TECHNOLOGIES FOR HIGH PERFORMANCE HOSPITALS

03.22.2011

10 am - 2 pm

LOCATION

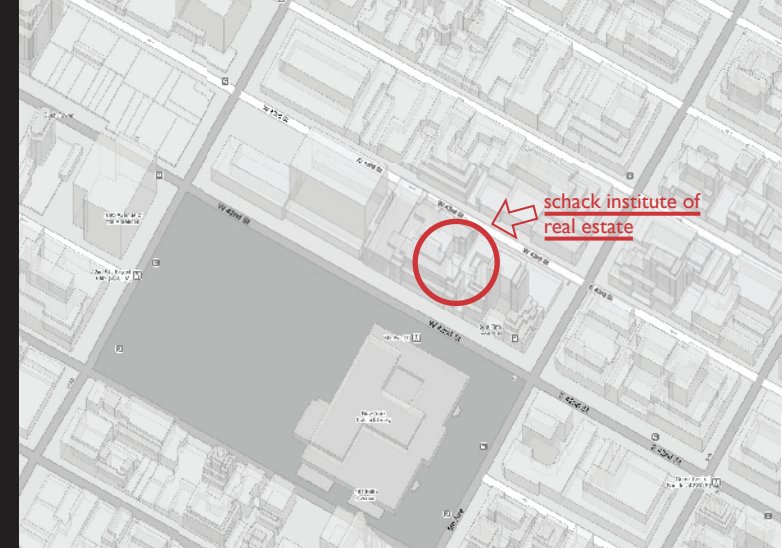
New York University
Center for the Sustainable Built Environment
Schack Institute of Real Estate
11 West 42nd St # 4
Goral Conference Room

LUNCH

a light lunch will be provided
vegetarian options will be available

a kind thank you to our hosts, Constantine Kontokosta
and the NYU Schack Institute of Real Estate

University of Washington
College of Built Environments
Department of Architecture
Integrated Design Lab
for day-of questions call: 206-999-5664



AGENDA

- | | |
|---------------|--|
| 10:00 – 10:30 | Introductions
Joel Loveland |
| 10:30 - 11:00 | Presentation of Previous Research
Heather Burpee, Joel Loveland |
| 11:00 – 11:30 | Implications for New York
Joel Loveland, Mike Hatten, Martin Connor |
| 11:30 – 12:30 | Questions & General Feedback
As a Large Group |
| 12:30 – 12:45 | Grab a Lunch (provided)
And gather into break-out groups |
| 12:45 – 1:30 | Targeted Conversations
Break Out Groups |
| 1:30 – 1:45 | Groups Report Back
Facilitated by Joel Loveland |
| 1:45 – 2:00 | Final Wrap-Up
Joel Loveland |

ADVANCED ENERGY EFFICIENT BUILDING TECHNOLOGIES FOR HIGH PERFORMANCE HOSPITALS

University of Washington | College of Built Environments | Integrated Design Lab

PROJECT TEAM
NBBJ Architects
SOLARC Architecture & Engineering
TBD Consultants

Rikshospitalet
Oslo, Norway
Photo: Heide Martin

PROJECT SUMMARY

The Integrated Design Lab (IDL), a research organization of the University of Washington's Department of Architecture in the College of Built Environments has developed a significant foundation for designing and delivering high performance, energy efficient hospitals. In August 2010, the IDL with a team of experts including SOLARC Architecture and Engineering, NBBJ Architects, and TBD Consultants, were awarded a US Department of Energy grant under the American Recovery and Reinvestment Act to continue researching methodologies for attaining significant energy savings in hospitals.

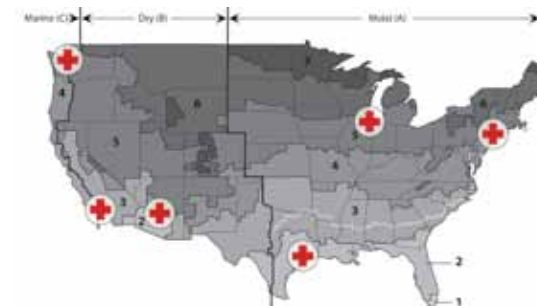
This research involves collecting data on existing hospitals, developing detailed energy and cost simulation models, and analyzing how to integrate hospital buildings and systems to produce high performance hospitals that utilize 60% less energy than typical operational hospitals. The research team will also design and disseminate educational tools to key stakeholders in hospital design, construction, and operations. It expands the in-depth research that the team has collected for the Pacific Northwest and applies it nationally to the most populous ASHRAE climate zones of the United States with studies based in: New York, Chicago, Houston, Phoenix, Los Angeles, and Seattle.

LOOKING TOWARD NET ZERO

Ultimately this research, development, and analysis will lead to recommendations for significant energy savings with associated cost implications for two hospital morphologies per region. The work addresses achieving the Architecture 2030 Challenge. Architects, engineers, and building owners are adopting this goal, which targets a greater reduction in energy use every five years to ultimately reach net zero in 2030. For buildings that will begin operations between 2010 and 2015, the goal is a 60 percent reduction from standard operational use. This research team emphasizes that any proposed strategies must work in concert: to get a 60 percent increase in energy efficiency, an integration of teams and systems is required.

A NATIONAL SCOPE

New York: Zone 4a
Chicago: Zone 5a
Houston: Zone 2a
Phoenix: Zone 2b
Los Angeles: Zone 3c
Seattle: Zone 4c



FOR MORE INFORMATION

Principal Investigator: Joel Loveland, loveland@uw.edu, 206.616.6566
Project Manager: Heather Burpee, burpee@uw.edu, 206.616.6566
Project Coordinator: Heide Martin, heidem@uw.edu, 206.616.6566
IDL website: www.idlseattle.com

W UNIVERSITY of WASHINGTON

COLLEGE OF BUILT ENVIRONMENTS

A NATIONAL PEER REVIEW PROCESS



Pacific Northwest Peer Review
Seattle, Washington
Photo: Joel Loveland

RESEARCH AS COLLABORATION

The development of complex hospital projects requires multi-faceted perspectives and expertise. The goal of this research is to provide information that can be used in the development of real projects. Therefore it is critical to understand the regional differences in hospital design, construction, and operations. The direct involvement of key industry experts in the development of the research will help build the most relevant framework for findings that have the best chance for implementation. The peer review process will build this framework by providing a forum for regional hospital stakeholders to have an impact on this research by contributing to the structure, design, and results of the project.

PAST SUCCESS

Peer review sessions in previous research by this team included the participation of utility representatives, owner representatives, facility managers, architects, engineers, cost experts, and contractors. These past peer review sessions, through the dedicated participation and expertise of local and regional industry experts, played a key role in producing research that is grounded in practice and experience. Leaders in healthcare design, construction, and operation were asked to review study materials and come prepared to communicate their perspective on the strengths, weaknesses, and areas for further research. Various participants have indicated that the review session was vital to providing an in-depth understanding of the project, creating acceptance surrounding the outcomes, and helped make the project more closely align to the realities of healthcare design, construction, and operations.

PROPOSED PROCESS

One half-day in-person peer review meeting is planned for each city with a two follow-up online presentations highlighting the progress and results of the study as well as the development of tools designed to disseminate research knowledge.

REGIONAL IN-PERSON MEETING | LATE WINTER & SPRING 2011

In-person peer review sessions will focus on the framework of the study including climate, average regional energy use in hospitals, and key strategies proposed with opportunity for discussion about region specific design, cost of construction, and operation of hospitals.

REGIONAL ONLINE MEETING | LATE 2011

During the beginning of the dissemination phase of the project an online meeting will be organized with each region to present the progress and preliminary results of the study and the tools that are being developed to communicate study results. Key individuals from the research team will present research results from the region, with a comparison of results from other regions. Peer review participants will have the first opportunity to see the results of the study and will see how their feedback impacted the trajectory of the project. They will also have an opportunity to provide feedback on the tools that are developed for public dissemination of the project.

NATIONAL ONLINE MEETING | MID 2012

At the end of the project an online meeting will be organized to present the results of the study to all reviewers. The presentation will include the final research results with an unveiling of the tools that are developed to communicate study results.