

## **I<sup>2</sup>SL Benchmarking Working Group Meeting Minutes**

### **2015-06-01 Conference Call**

Attendees: Alison Farmer, Michelle Ruda, Bryan Donovan, Brad Cochran, Craig Wray, Dan Doyle, David Landman, Joe Pustai, Paul Mathew, Vikram Sami, Allison Paradise, David Cohen

**Item #1** – Attendance and overview of the agenda (refer to end of minutes)

**Item #2** – Upcoming I<sup>2</sup>SL Annual Conference

- (2) Presentations at the conference by our working group
  - Alison’s presentation – Update on the progress of the working group
  - LBNL – Craig (or Paul) will present on the current state of the lab benchmarking with a brief history.
- Wednesday afternoon working group meeting

**Item #3** – Alison Farmer went through a summary of the preliminary results

- Overall good set of responses – thanks to everyone for their efforts in publicizing the survey!
- 374 respondents (315 fully completed)
- Mostly designers, consultants, and facilities staff (75% of respondents)
- 166 people willing to participate in a follow-up survey
- 80% of respondents state benchmarking is important to them
- Top picks for new features: larger database, more granular data, vivarium data, additional metrics, updated UI
- Top benchmarking metrics: lab air change rate, site EUI, end use breakdown

**Item #4** – Data Analysis on Results

- Vikram will head up the data analysis with a group of volunteers – Data Analysis Subgroup: Alison Farmer, Michelle Ruda, Dan Doyle, Allison Paradise, David Landman
  - A separate call will be scheduled for the subgroup
- Filter responses to understand how different groups respond to the tool
- Summary white paper analysis to be written by the group and shared by I<sup>2</sup>SL
- Current priority is to get presentation together for the conference

**Item #5** – G/BA Hospital Benchmarking

- Dan Doyle gave a summary of the G/BA Hospital Benchmarking efforts
  - Energy comparisons between G/BA clients for 25 years.
  - \$/SF or \$/energy unit has been a very powerful metric (in addition to the standard kBtu/SF)
  - Energy star benchmarking exists for hospitals, but there is no competing benchmarking system existing for labs
  - No weather normalization in G/BA benchmarking because it is regional information
  - Each facility gets a 3 digit number that is kept private

- Data is presented on the website in bar graph forms (it was found to be most practical to present information tuned to non-technical viewers who can use it to get funding etc)
- Single input sheet utilized to limit difficulty in retrieving data
- Survey is free for any participating hospital (costs company/BA \$15,000-20,000 / year)
  - Utilized engineering student interns over the summer to input data
  - Outlier data is tossed out if it cannot be confirmed to be true
- Data collected annually
  - Owners that have seen the benefits of the benchmarking send data without much persuasion.
  - Using benchmarking metrics to drive change (air change per hour vs. BTU/SF to encourage changes)
- Hurdles
  - Retrieving water usage data is more difficult
    - Requires water and sewer
      - Few places meter sewer
    - 2/3 to ¾ of the hospitals that enter energy data also enter water data
    - The last 1-2 years, more attention is being paid to the water due to droughts
  - Facility Operations don't always see the utility bills. Bills handled by a separate group.
    - Easier to get the energy and water data with these software services
    - Cost of service depends on the size of the site (single site with good size \$5,000 to \$12,000 per year)
- Hospital EUIs have not declined significantly over the years. Amount of imaging equipment and the move to electronic medical record systems has driven cooling loads and electricity usage up significantly.

#### **Item #6 – Building Performance Database**

- Paul Mathew discussed possible synergies between Labs21 database tool and BPD
  - <https://bpd.lbl.gov/>
  - The BPD is not lab specific and does not currently have specialized metrics
  - Could the BPD be a place to store labs data and add features rather than re-funding the Labs 21 tool?
    - Requires follow-up discussions
    - Requires demand for the metrics and willingness to retrieve data
    - DOE priority for accepting proposal is that the tool will be used. Alison to send the summary of our benchmarking survey to LBNL to show interest in tool improvements.
    - BPD is government funded and would allow us to avoid issues around private funding

## Item #7 – Next Items

- Next call likely after July 4th. Doodle poll to be sent.
- Data Analysis Subgroup to get started prior to next call.

Minutes prepared by Michelle Ruda and Bryan Donovan  
6/2/2015

### I<sup>2</sup>SL Benchmarking Working Group Conference Call

**Date and Time:** Monday 1 June 2015, 4pm-5pm EDT / 1pm-2pm PDT

**Call-in/sign-in info:**

- Webmeeting: <https://global.gotomeeting.com/join/604309909>
- Call-in line: (646) 749-3122. Access Code: 604-309-909

**Expected attendees:** benchmarking working group members

**Purpose of meeting:** summarize survey responses; outline plan for next steps, and match volunteers with tasks.

**Agenda:**

Item #	Description	Presenter	Time	Expected Product/Outcome
1	Roll call	Alison (and Secretary)	2 min	Attendee list
2	I <sup>2</sup> SL annual conference update and outline of working group timeline	Alison	5 min	
3	Survey update: overview of responses, prize drawing, thanks, tasks (data analysis and follow-up interviews)	Alison	10 min	
4	Data analysis: tasks, volunteers needed	Vikram	5 min	Data analysis subgroup
5	The G/BA hospital benchmarking survey: practicalities and lessons for lab benchmarking	Dan	15 min	
6	Ownership, funding, practicalities for the Labs21 database and tool; possibility of integration with BPD	Paul	5 min	
7	Review of action items; date of next call	Alison	5 min	Action items!