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# 2018 Special Request for Research Proposals

## Real Estate Research Institute and Lawrence Berkeley National Laboratory (LBNL)

**\$10,000 - \$50,000 Available to fund real estate research**

**Proposal submission deadline: April 16, 2018**

### Overview

Lawrence Berkeley National Laboratory (LBNL) has spent the past several years collaborating with the commercial real estate industry to understand research questions that are of particular interest and could provide actionable results for market stakeholders. Having received input from these key stakeholders, LBNL, through RERI, now seeks proposals for funding of research to be undertaken in 2018.

LBNL aims to facilitate research that will provide empirical, quantitative, market-focused research results in areas that have not been sufficiently explored around energy, green building features and financial value. Specifically, the intent is to generate meaningful, actionable results capable of influencing commercial real estate practitioners -- such as owners, managers, investors -- and encouraging greater investment in energy efficient technologies, retrofits, and buildings.

### Logistics

Projects involving researchers from different disciplines or jointly undertaken by academic researchers and industry professionals are strongly encouraged. Proposals may involve research that is underway, but not substantially completed, at the time of application. With the exceptions of university and college settings and academic conferences, partial or completed research cannot be presented to any organization prior to presentation at the RERI Conference. Completed projects must include a two-page executive summary that synthesizes the research thesis, key results and next steps if appropriate. Authors should note that a separate, nontechnical summary that emphasizes implications for industry practitioners or investors with a limited background in quantitative analysis may be created by the LBNL team member/designee of RERI's board/advisory board and posted to the RERI website.

Grants may range from \$10,000-\$50,000, but we are open to considering smaller or larger proposals for exceptional reasons. Research projects that are funded and successfully completed will be eligible for presentation at the DOE's Better Buildings Summit.

**Deadline for receipt of proposal to RERI:  
April 16, 2018 Midnight EST** Proposals  
and information requests should be e-  
mailed to:

eri@eri.org

The Real Estate Research Institute  
100 Pearl Street, 13<sup>th</sup> Floor  
Hartford, CT 06103  
USA  
Telephone: (860) 692-6341

# 2018 Research Priorities Specifications

## 2018 Research Priorities

We are broadly interested in research that addresses questions of the following general form:

**What is the impact of energy efficiency and green building feature(s) on financial value metric(s)?**

Within that broad scope, we are particularly interested in metrics and market sectors that have not been well explored in prior research, as indicated in Table 1. We are primarily interested in studies that focus on the US building stock, but will consider non-US market studies if there are direct implications to the US market.

Based upon feedback from market partners, and in-depth workshop discussions and collaboration with leading academics, below are selected examples of potentially meaningful research topics (in no particular order):

- Price Indices to compare the financial performance of green assets to conventional properties
- Analysis of green building certifications and the number of green buildings in comparison to macroeconomic trends and market cycles
- Deeper understanding of energy efficient retrofit and upgrade project costs and cost of capital in relation to financial value of retrofits.
- How deregulation of energy in certain markets has impacted the energy efficiency of the building stock
- Financial impacts of improving a low performing building (e.g., moving from the 25th percentile to 50th)
- Relationship between energy price and use to identify markets or regions where focusing on energy risk management will provide the greatest benefit

Figure 1. Density matrix of peer-reviewed literature exploring relationship between green metrics and financial value, based on 2017 LBNL Literature Review. Numbers in each cell indicate the number of peer reviewed journal papers with quantitative results.

	LEED	EnergyStar label	Energy Star score	Energy use	BREEAM	EPC (UK)	BOMA BEST	Walkability	Non-energy green features	Other
Rent	20	18	1	2	2	2	1	1	1	
rent concessions	1	1					1			
Sales Price	9	11		1	1			1		1
Assessed value	2	2								
Market value	1	2				1		2		1
Occupancy	10	9					1			
lease renewals	1	1					1			
Service charge						1				
Operating cost	2	3								
Energy Cost	2	3								
Tenant satisfac.	1	1					1			
Sales time	1	1								
default rate								2		1
pre-payment rate										
Cap rate	1	2						2		1
NOI		1						1		1
LTV								1		1
DSCR								1		1
Worker productivity	1	1								
Other	5	4				1		4	2	2

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# Proposal Requirements Specifications

## Research Proposal Requirements

LBNL may be able to assist in acquiring building-level, lease-level, and financial data from third-party real estate data providers. Researchers proposing to use data that are neither in hand nor readily available are advised to include in their proposals detailed descriptions of the data sources, costs and timelines for acquisition. Note that funding may be reduced by the cost of data acquisition if LBNL is able to source the same data as proposed for the project.

### Submission requirements:

- (a) The proposal should not exceed six pages in length, double spaced, including references and attachments (but excluding resumes).
- (b) Only one proposal per researcher or team of researchers may be submitted.
- (c) Only e-mailed proposals will be accepted.
- (d) The deadline for receipt of proposals is midnight EST April 16, 2018. Proposals submitted after the deadline will not be considered, nor will faxed or mailed hardcopy proposals.

To facilitate processing, applicants should structure the proposal in accordance with the section outline shown below:

- Cover Page: Project title, name of researcher(s), organizational affiliation(s), contact details for each researcher (including daytime telephone number and email address), and a one-paragraph abstract of the proposal.
- Section 1. Well-defined research objective stating the question or issue to be investigated, and how the question will extend the current literature
- Section 2. Concise description of methodology. Complex proposals may benefit from a diagram or flow chart presentation of the methodology, as well as a narrative description.
- Section 3.
  - (a) Description of principal data sets and availability. (This is a major factor in successful proposals.)
  - (b) Plan for procuring third-party data in a timely manner, if the research will be relying on third party data.
- Section 4. Research project timetable.
- Section 5. Budget and cost share, if applicable.
- Required Attachment. A one-page resume for each of the principal researchers, showing experience and understanding of the research topic as evidenced by selective references to previous work experience, presentations and/or publications.

## Research Timetable

- March 2018 – RFP Issued
- April 2018 – Proposals Due
- May 2018 – Notification of acceptance
- September 2018 – Interim results and update
- March 2019 – Final papers due
- Spring/Summer 2019 – Presentation of work

In addition to the key dates listed above, the LBNL team expects at least one project update call per month to communicate project progress, challenges, and next steps.

## Review Procedures

Proposals are reviewed by the Proposal Review Committee of the RERI Board of Directors and Advisory Board. See the RERI website ([www.reri.org](http://www.reri.org)) for more information.

The Proposal Review Committee recommends to the Institute's Board of Directors the research proposals that it believes RERI should fund for 2018.

Following approval by the Board, one or more members of the Board or Advisory Board are assigned as "mentors" to each research project.

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[rerl@rerl.org](mailto:rerl@rerl.org)

The Real Estate Research  
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Floor Hartford, CT 06103  
USA

Telephone: (860) 692-6341

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# 2018 Request for Research Proposals

## Real Estate Research Institute (RERI) and Lawrence Berkeley National Laboratory (LBNL)

### About the Institute

The Real Estate Research Institute (RERI) is a non-profit organization that was incorporated in 1987 to stimulate high quality research on real estate investment performance and market fundamentals. Since its founding, RERI has provided funding for over 150 research papers and has helped create a body of scholarly research on topics that are timely and of interest to institutional real estate investors. RERI is supported by an extensive sponsor base of industry associations, real estate investment advisory firms, and industry research firms. Governance is provided by a Board and Advisory Board made up of leaders from both the industry and academic communities.

RERI's mission is to encourage and reward research on real estate as an investment and as an asset class that is both academically rigorous and of value to the institutional real estate investment profession. In addition, RERI serves to provide a forum through which the real estate academic, professional, and regulatory communities can interact, facilitating the exchange of insights amongst these stakeholders.

Administrative functions of the Institute are housed at the Pension Real Estate Association (PREA)

[www.prea.org](http://www.prea.org)

### About LBNL

Lawrence Berkeley National Laboratory (LBNL) is a member of the national laboratory system supported by the U.S. Department of Energy through its Office of Science. It is managed by the University of California and is charged with conducting unclassified research across a wide range of scientific disciplines. LBNL's Energy Technologies Area performs analysis, research, and development leading to better energy technologies and reduction of adverse energy-related environmental impacts [eta.lbl.gov](http://eta.lbl.gov).

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