



A Quick Guide to Using the BOMA Industrial EER (Experience Exchange Report) Reports

As a user of BOMA International's reporting system for its Experience Exchange Report survey of Industrial Properties, welcome! We hope that you find the reports that you generate helpful for exploring and understanding the financial operations of industrial properties in North America.

As you generate various reports based on the data we want to help you understand how the data is generated and what it reflects in how industrial properties are managed and operated throughout North America. This Guide is intended to support that goal.

Report Format

The Industrial Properties Experience Exchange Report is organized into four basic sections:

Section One provides a break-down of the characteristics of the properties that you, the user, specify when you decide how to aggregate properties to generate financial and operations statistics. Using these "parameters", as they are called, you can generate reports for many different clusters or groupings of the 3,573 properties for which BOMA collected survey data for the 2017 financial year.

Section Two, titled "Occupancy Summary – 2017," provides an overview of the operating experience of the cluster of properties you specified in Section One. The line items here reflect questions in the survey, such as the number of tenants occupying a property, and the size of the property (SQFT per Tenant).

Section Three, titled "Income and Expense Overview – 2017" provides several alternative statistical measures of the data respondents provided to questions about their property's income and expenses. All of the line items shown in this section reflect, in one way or another, sums of income and expense components which were provided via more detailed questions in the survey form.

Section Four, titled "Income and Expense Detail – 2017" provides alternative statistical measures of the data respondents provided to detailed questions about their property's financial operations. In subsequent text, these line-items will be referred to as "components."

Statistical Measures

For every report that you generate, the statistical data shown will summarize the financial operations of the properties in the BOMA International Industrial Property database that satisfy the criteria you specified in Section One. That is, of 3,573 industrial properties for which BOMA International received survey data for 2017, the characteristics that you specify in Section One will create a sub-set or cluster of properties for which financial statistical data will be calculated:

- The Number of Buildings indicates the total number of free-standing structures that are included in the cluster or grouping of survey data.



- The Average value (of, e.g., Base Rent) is calculated by summing all the responses to the question about the amount of dollars received for Base Rent, for the selected cluster of survey records, and summing all the responses to the question about the gross square footage or size of the properties for the selected cluster of survey records, and dividing the sum of the Base Rent by the sum of the gross square footage. Within the cluster of properties you selected, survey records where the respondent failed to provide a non-zero value for Base Rent are excluded (respondents who failed to indicate the size of their property are withheld completely from the database).
- The Median value (of, e.g., Base Rent) is calculated by two steps. First, for all the survey records contained in the cluster you specified via Section One, the Base Rent per gross square foot is calculated by dividing the (non-zero) Base Rent dollars reported by the Total Gross Property Area. Step Two identifies the Base Rent per square foot value such that one half of all the records in the cluster have values below this value, and one half of all the records in the cluster have values above this value. This value is the Median Value.
- The Lower and Upper Quartile values are calculated in a manner similar to the median value. The Lower Quartile represents that value (of, e.g., Base Rent) such that one quarter of all the properties in the cluster have Base Rent per square foot values below the Lower Quartile, and three quarters of all the properties have Base Rent per square foot values above the Lower Quartile. The Upper Quartile is similar: three quarters of all the properties have Base Rent per square foot values below the Upper Quartile, and one quarter of all the properties have Base Rent per square foot above the Upper Quartile.

A “business rule” that BOMA employs, to assure confidentiality of individual survey records, is that each report must cover or include at least 5 buildings. If the parameters you specify in Section One produce a cluster of fewer than 5 buildings, no report will be generated. Similarly, within a report, if there are fewer than 5 buildings providing data for any given line item, statistical data for that line item will not be shown.

The Integrity of Data

BOMA International strives to assure that the data made available to users via the Experience Exchange Report is accurate, valid, and reliable:

Accuracy recognizes that the financial values reported for a property are not estimates or budgeted figures, but are actual annual values, and not rounded off (e.g., to the nearest \$10,000).

Validity recognizes that the reported values do not contain typos, are for an actual, existing property, and reflect the nature of the question asked.

Reliability recognizes that some properties are undergoing major transitions (massive turnover of tenants, major upgrades in property quality or characteristics), and therefore the data reported is not reflective of normal, on-going operations.

Achieving these goals is not easy, especially for industrial properties and especially in the inaugural year of the survey. The management and operating practices for industrial properties are very diverse: some properties



are operated under triple net lease terms, where very few expenses may be managed directly by the property owner, whereas other properties are managed under gross leases, where the owner/manager assumes responsibility for many if not all major expense line-items. The types of occupancy of industrial properties varies widely, and therefore the demands that tenants impose on industrial properties is diverse. Some properties resemble fully finished out office buildings, occupied by high numbers of office workers (e.g., call centers), whereas other properties are large shell buildings with few amenities and workers (e.g., bulk warehouses). Yet others may house manufacturing operations, which consume large quantities of resources such as energy and water.

The consequence of surveying this broad range of uses of industrial properties is that the income and expense values, on a per square foot basis, can vary widely. The difference between the lowest values reported (per square foot) for a line item (e.g., water and sewer) and the highest values can be on the order of 1000 - \$0.001 psf versus \$1.00. This range makes it extremely difficult to spot typos in reported values – and few respondents are perfect typists of numbers!

We should also point out that, regarding the range of values that appear to be legitimate, some can be negative for some industrial properties in some years. An obvious example is Additional Rent: if a property incurs a very large rent abatement in a given year (which itself is reported as a positive number, an offset to other sources of rent), the value for Additional Rent can be negative. Some expense components can also be negative in a given year for a given property – evidently the consequence of refunds or rebates.¹

In the 2018 survey year (2017 data), about 3,390 survey records out of 3,466 total records in the data base were provided via “bulk” submittal processes, i.e., data downloaded directly from a management company’s accounting system to the BOMA database, via Excel files. This situation offers both benefits and disadvantages that the users of Industrial EER reports should be aware. On the “plus” side, the financial data is less likely to contain typos, and this data is likely to be consistent for the multiple properties submitted via each respondent. On the negative side, the accounting system does not contain the data to answer many of the questions that the BOMA Industrial EER Survey asks (such as, “number of free standing buildings within a given property”, or “types of use of a property’s tenants”. Also, some respondents did not pull the data from their accounting systems consistently, or the accounting system stores the financial information desired via multiple accounts or line-items.

The concluding cautionary note to users is to anticipate that the 2017 data may contain apparent inconsistencies from one report you generate to another. Some of these will be legitimate, reflecting the wide diversity we find in the financial operations of industrial properties, and some of these will reflect data problems that we were not able to detect or address.

¹ For those with expertise in statistics, the values reported for many component line-items reflect a Poisson distribution rather than the more commonly recognized “normal” or Bell shaped curve: values for most properties are small, on the order of a few cents per square foot, but the right end “tail” of higher values is long.



The Integrity of Line-Items, versus Totals

A concept that BOMA International has strived to maintain is the data integrity of individual line items. For every line item of data, reflecting a question in the survey, BOMA strives to assure that the statistical values shown for that line item are accurate, reliable, and valid – see the previous section. Each line item may reflect data for a slightly different set of property records, however, depending on how many records provided data for a given line item.

This integrity concept becomes most apparent when one compares the values reported for component line items versus a line item that purports to represent the sum of the components. Users should not expect the values in a Total line item to match or equal the sum of the values for individual component line items. There are several reasons for this:

- Not all respondents who provided data for a Total line-item provided data for all the component line-items;
- Some respondents provided a distinct value for a Total line-item that does not equal the sum of the values they provided for component line-items;
- Some respondents provided a value for a Total line-item, but did not provide values for ANY component line-items;
- BOMA has altered the calculation of values for some Total line-items.

The Definitions and Interpretations of Totals

To elaborate on the last bullet of the previous section, we conclude this user guide with discussion of the definition and interpretation of some of the Total line-items shown in Section Two of the report. When the BOMA Industrial Property Task Force developed the Survey Questionnaire, they recognized that in some parts of North America, for some industrial property operations, tenant leases provide for direct tenant involvement in capital expenditures. This involvement requires survey questions that address financial transactions that affect a property's accounting balance sheet: contributions to capital expenditures or major repair reimbursements (cash inflows), and amortizable capital expenditures (cash outflows). The amounts involved, especially for amortizable capital expenditures, can be large, on a per square foot basis, relative to routine annual operating expenses (e.g., re-surfacing and striping of paved areas).

In addition, some property owners/managers elect to expense some infrequent but major expenditures, rather than treat them as amortizable expenditures. Again, large sums (on a per square foot per year basis) can be involved.

These differences in management practices can create distortions, and confusion by report users, of what the values for a given Total line item are representing. For these reasons, the values presented for some Total line-items have been edited to reflect the following definitions or interpretations:



- Total Rental Income reflects properties for which Base Rent and/or Additional Rent was reported, but these properties did NOT report Additional Income. Total Rental Income is the “bottom line” on revenues for these properties.
- Total Industrial Revenues reflects properties for which not only Base Rent and/or Additional Rent was reported, but also these properties reported non-zero values for Additional Income. Total Industrial Revenues is the “bottom line” on revenues for these properties that not only reported traditional income line-items but also reported cash inflows to their balance sheets to compensate for capital expenditures.
- Total Operating Expenses reflects the sum of all expense line-items that are typically recognized in a statement of income and expenses, i.e., it includes not only the conventional expense component line-items shown in the Section Four details but also the “Non-recurring Major Expenses”.
- Total On-going Expenses reflects the sum of all expense line-items that are typically recognized in a statement of income and expenses, but it excludes “Non-recurring Major Expenses”. It equals Total Operating Expenses – Non-recurring Major Expenses, and should be interpreted to reflect “expected annual expenses”.
- Total Reimbursable/Directly Recoverable Expenses is actually a component line-item, which stands alone and is not included in any totals. A major issue in operating industrial properties is the variety of lease structures employed (triple net, modified gross, gross) and the diversity of clauses to directly recover various component expense line items. In the BOMA survey, the objective is to identify the amounts of expense for the alternative expense line-items shown in the report, regardless of whether they are directly reimbursed, or not. The purpose of the question about Total Reimbursable/Directly Recoverable Expenses is to provide a sense of the proportion of all expenses reported (Total Operating Expenses) that are directly recoverable.

Converting Data Using ACCRA’s Cost of Living Index

ACCRA’s Cost of Living Index is a widely used index designed to provide a reasonably accurate measure of living cost differences among urban areas in the United States. The Index is produced quarterly, although participating cities vary by quarter. *EER* users should be aware that while the Cost of Living Index is a useful tool in estimating office building income and expenses, the Index was designed to reflect differences in living costs among consumers. Differences in business costs that affect office building operations may not be completely reflected in the Index.

Listed below, by State, is a series of cities for which fourth quarter 2009 ACCRA Cost of Living Index data is available. Cities that are bolded represent “source cities” for which *EER* data is available. Cities that are not bolded indicate “target cities” for which no *EER* tables exist, but for which data can be generated using the following formula:

$$\text{Target City } \$ \text{ psf} = (\text{Target City Index} / \text{Source City Index}) \times \text{Source City's } \$ \text{ psf}$$



For example, in order to calculate Total Income per square foot for private sector downtown properties for Fresno, CA, a user should divide the Cost of Living Index for Fresno, 120.4, by the Cost of Living Index for neighboring San Francisco, CA, 169.5. The result, 0.71, is then multiplied by the Total Income per square foot reported in the San Francisco *EER* table for the corresponding type of properties (\$35.09, for private downtown buildings). The resulting dollar amount, \$25.07 is the estimated Total Income per square foot for all private downtown buildings in Fresno.

Total Income
 For all Buildings in
 Fresno, CA = $(120.4/169.5)*\$35.09$
 = $0.71* \$35.09$
 = \$24.91

Users are cautioned that this procedure yields estimates only. It is not valid to treat percentage differences between areas as exact measures. Also, it is recommended that adjustments be calculated only between cities in close proximity to one another and the more buildings covered in the base reference table, the better. This method will yield the most accurate estimates of average income and expenses. In other words, attempting to calculate total operating income for Dover, DE by adjusting data found in a Los Angeles, CA table, or using a table from a nearby city but with fewer than 30 buildings, may not be appropriate.

ACCRA Cost of Living Index for Selected Cities (2015)

<i>ALABAMA</i>	
Birmingham	91.7
Montgomery	93.4
<i>ALASKA</i>	
Anchorage	132.4
Juneau	130.6
<i>ARIZONA</i>	
Phoenix-Mesa-Scottsdale	95.9
Tucson	92.8
<i>ARKANSAS</i>	
Fayetteville	88.2
Little Rock	95.2
<i>CALIFORNIA</i>	
Los Angeles-Long Beach	140.3
Oakland	147.0
San Diego	144.8
San Francisco	176.4
<i>COLORADO</i>	
Colorado Springs	95.3
Denver	109.6
<i>DELAWARE</i>	
Wilmington	105.9
<i>WASHINGTON, DC</i>	
DC-MD-VA	146.8
<i>FLORIDA</i>	
Fort Lauderdale	114.2
Gainesville	96.7
Jacksonville	99.0
Miami	112.3
Orlando	98.2
Sarasota	103.3
Tampa	91.6



<i>GEORGIA</i>	
Atlanta	99.9
Valdosta	92.3
<i>HAWAII</i>	
Honolulu	188.2
<i>IDAHO</i>	
Boise	90.8
<i>ILLINOIS</i>	
Champaign-Urbana	95.6
Chicago	116.2
Peoria	98.2
Springfield	88.9
<i>INDIANA</i>	
Fort Wayne	86.2
Indianapolis	91.1
South Bend	88.7
<i>IOWA</i>	
Cedar Rapids	94.6
Des Moines	89.8
<i>KANSAS</i>	
Wichita	93.1
<i>KENTUCKY</i>	
Lexington	90.4
Louisville	92.2
<i>LOUISIANA</i>	
Baton Rouge	92.4
New Orleans	94.3
Shreveport	88.5
<i>MARYLAND</i>	
Baltimore	112.8
<i>MASSACHUSETTS</i>	
Boston	144.3
<i>MICHIGAN</i>	
Grand Rapids	92.4
Kalamazoo	85.3
<i>MINNESOTA</i>	
Minneapolis	108.2
St. Cloud	96.1
<i>MISSISSIPPI</i>	
Jackson	83.2
<i>MISSOURI</i>	
Columbia	95.3
Kansas City MO/KS	94.1
Saint Louis	92.5
Springfield	88.7
<i>MONTANA</i>	
Bozeman	102.7
<i>NEBRASKA</i>	
Omaha	91.3
<i>NEVADA</i>	
Las Vegas	108.2
Reno-Sparks	104.8
<i>NEW JERSEY</i>	
Newark	126.6



<i>NEW MEXICO</i>	
Las Cruces	102.0
<i>NEW YORK</i>	
Buffalo	95.3
Ithaca	105.5
New York (Manhattan)	227.4
Rochester	99.2
<i>NORTH CAROLINA</i>	
Charlotte	96.4
Raleigh	90.5
<i>NORTH DAKOTA</i>	
Bismarck	101.4
<i>OHIO</i>	
Akron	101.2
Cincinnati	90.9
Cleveland	101.2
Columbus	90.5
Dayton	92.8
Findlay	96.2
<i>OKLAHOMA</i>	
Oklahoma City	88.1
Tulsa	86.0
<i>OREGON</i>	
Portland	129.5
<i>PENNSYLVANIA</i>	
Philadelphia	119.5
Pittsburgh	98.6
York County	101.2
<i>SOUTH CAROLINA</i>	
Charleston	101.0
Columbia	95.1
<i>TENNESSEE</i>	
Chattanooga	95.1
Knoxville	86.4
Memphis	84.5
Nashville	95.2
<i>TEXAS</i>	
Austin	96.0
Dallas	96.1
El Paso	91.3
Fort Worth	102.8
Houston	98.2
San Antonio	87.3
<i>UTAH</i>	
Cedar City	88.6
Salt Lake City	96.4
<i>VERMONT</i>	
Burlington	123.8
<i>VIRGINIA</i>	
Richmond	94.9
Roanoke	90.0
<i>WASHINGTON</i>	
Olympia	100.1
Spokane	95.5
Tacoma	105.0



WEST VIRGINIA

Morgantown 103.7

WISCONSIN

Eau Claire 97.0

Madison 104.5

Milwaukee 100.3

WYOMING

Laramie 92.8

For additional information on ACCRA's Cost of Living Index, contact Council for Community and Economic Research at:

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