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## **Investigating the Trend in Office Renovations**

Have you noticed more talk of office property renovations lately? Over the course of the past year, we've been hearing a lot of talk about office renovations from business contacts engaged with the Atlanta Fed's Regional Economic Information Network, as well as reading about more office renovations in our markets (see here 🙉, here 🚜 and here 🚜 for just a few of many examples). This motivated our search for data that could help us understand the trend in office renovation activity, particularly as it relates to new office construction.

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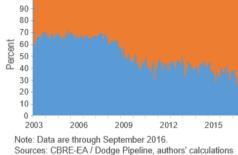
To our dismay, there was not much readily available data on office renovations. We turned to Dodge Data & Analytics, formerly known as McGraw Hill Construction, which collects project-level data on construction activity across 382 metropolitan markets in the United States. The data set not only tracks nonresidential construction activity by property type and stage of construction on a monthly basis, but also identifies the type of construction (which includes new construction, addition, alteration, and conversion).

Construction Type	Description
New construction	Creates new buildings
Addition	Adds space to an existing building (net addition to existing stock)
Alteration	Changes an existing building without adding additional square footage to existing stock
Conversion	Changes from one property type to another (for example, warehouse to office)

Using the construction type variable, we selected all office projects that were marked as additions, alterations, or conversions and created a time series that provides a proxy measure for office renovation starts across the nation. Our time series runs from January 2003 to September 2016. Chart 1 shows the composition of office starts (that is, the share of new office construction starts versus office renovation starts) in any given month to provide insight into the mix of projects over time.

Chart 1

Share of Office Starts, United States Office Renovations New Office Construction 100



From 2003 through 2008, new office-construction projects comprised a larger share of office-related starts. But since 2008, the majority of office starts have been office renovations. We drilled down a bit further to understand the composition of the office renovations activity and found that alterations accounted for the majority of all renovations captured in this database over the course of the time series.

In addition to examining the makeup of the office-related construction activity, we also sought to understand the level of office construction activity. Ideally, we would have liked to examine the trend in renovations activity in terms of square feet under way because it would have given insight into the volume of activity (that is, size of projects) while controlling for changes in things like cost of land, materials, and labor (which have the potential to distort the project value), thus providing the best apples-to-apples comparison of activity over time. Unfortunately, this was not possible due to data limitations. Specifically, square footage under way is captured only for projects that add to the existing stock of office space (that is, where the construction type is listed as new construction or additions). Since additions make up such a small share of overall renovations activity, square footage data are missing for the majority of the observations.

As a result of this data limitation, we examined the trend in the number of office projects started over time. In chart 2, the blue line represents the number of new office construction starts, and the orange line represents the number of office renovation starts.

Chart 2 Office-Related Starts, United States 12-month moving average



Note: Data are through September 2016. Sources: CBRE-EA / Dodge Pipeline, authors' calculations

New office construction starts increased sharply from 2003 until 2005, when the number of projects leveled off. Office renovation starts increased during the same period, though at a much more modest pace, then also leveled off in 2005. New office construction starts began to drop in the first few months of the recession and fell rather sharply until the middle of 2010, while office renovation starts appeared to continue at a steady pace until halfway through the recession before softening a bit. Both new office construction and office renovation starts flattened out and continued at an unchanged pace throughout the early years of the recovery. New office construction starts experienced very little in the way of an uptick until 2016. Office renovation starts, on the other hand, began to rise at a fairly quick pace starting in 2015.

By creating a proxy measure for office renovations, we were able to take anecdotes from business contacts to the data and confirm that office renovation projects have, indeed, been on the rise over the past year. Stay tuned for our follow-up report, when we will drill down and explore renovations activity across the Southeast in more



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