

ENGRAIN

A PRODUCT STORY

Brookfield Residential

FEATURED UNIT MAP PARTNER



LOCATION

New York

PORTFOLIO

Developed and
Managed

PRODUCT





THE CHALLENGE

Visualizing data to identify pricing outliers, location-specific trends

Rental housing has rapidly transformed into a data-driven industry. But even data-driven insight comes with some challenges. Data can often be difficult to analyze and put into a real-world context, and sometimes the data tells a story that isn't easily discernible.

More apartment companies are leveraging data visualization software to digest data in a visual format and identify the subtle insights that can easily be overlooked on spreadsheets or charts.

Location-specific details can help to identify trends, patterns and outliers that can inform pricing and amenity strategies. Understanding how location plays a role in community patterns and across an entire portfolio is critical to maximizing revenue.

Brookfield Residential, which develops and operates real estate investments on behalf of

Brookfield Asset Management and currently manages more than 30,000 units, wanted to create map-based visualizations of all its communities within a centralized Business Intelligence (BI) dashboard. While Brookfield Residential had previously used Excel-based visualizations, there was a clear need to utilize a platform that fully encompassed the entire building and exact unit locations.

"A visualization for buildings is especially important for garden communities, or where the units don't exactly stack and are not equal size," said Gloria Smith, manager in data visualization and analytics at Brookfield Residential. "We needed a more comprehensive way to identify pricing outliers and trends based on building location and to audit amenities. It's difficult to audit amenities and really understand where specific units are located within a building, what they face, and other key details that help us price."

Leveraging Engrain's Asset Intelligence Power BI Visual within REBA's BI Platform

During the search for a visualization solution, Daniel Raphael, Brookfield Residential's vice president of data science, found Engrain. Engrain offered a map-based visualization tool for any property type to visualize data in an intuitive way, allowing Brookfield Residential to focus on specific problems and opportunities.

Brookfield Residential incorporated Microsoft Power BI into its technology stack in early 2022 and has expanded the tool across its portfolio. Engrain's building visual plugin works in Brookfield Residential's own Power BI dashboards but also within Real Estate Business Analytics (REBA), a powerful third-party data aggregation and BI platform.

"The integration was a significant component to our centralized data model," Smith said. "Integration can be a large barrier for many new technologies or products, but Engrain's integration with Power BI and REBA was seamless. These tools are amazingly intuitive and there's nothing else like it in the market for multifamily."

Smith noted that a lot of demand existed for a high-caliber data visualization solution within Brookfield Residential. The company wanted an exhaustive lens into property operations – a complete picture of community nuances that a chart or table could not display.

"We look at so much information, but looking at the data based on location within a building is something we couldn't do before," Smith said. "It was a very manual process to load that data, even

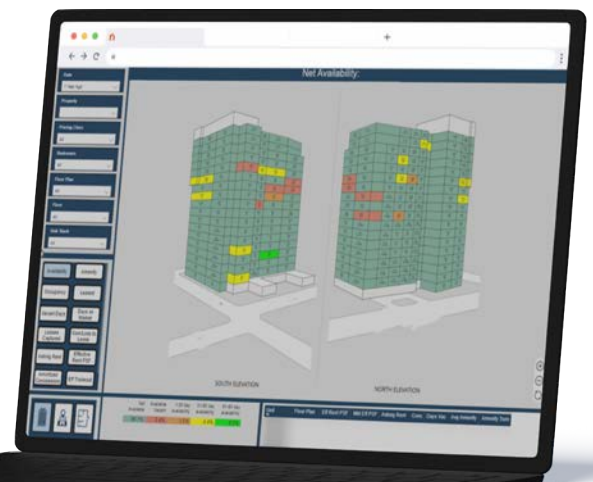
if it was into an Excel model. REBA and Power BI gave us the ability to look at numerous data sets in near real-time and slide in all those numbers without anybody lifting a finger. We have the information readily available, whenever we want, and it's a level of immediate insight that Brookfield didn't previously have."

“

We look at so much information, but looking at the data based on location within a building is something we couldn't do before.

Gloria Smith

*Manager, Data Visualization and Analytics,
Brookfield Residential*



“

Since launching REBA and layering Engrain's map-based visualizations within the dashboards, Brookfield can make quicker, more informed data-driven decisions with visual context that highlights complexities and nuances of each community. The level of granular detail and real-time insight from the maps paint a complete picture of what's happening within a community.

Gloria Smith | Manager, Data Visualization and Analytics, Brookfield Residential

THE RESULTS

Quicker, more informed data-driven decision making with real-time visual insight on a portfolio scale

Since launching REBA and layering Engrain's map-based visualizations within the dashboards, Brookfield Residential can make quicker, more informed data-driven decisions with visual context that highlights complexities and nuances of each community. The level of granular detail and real-time insight from the maps paint a complete picture of what's happening within a community.

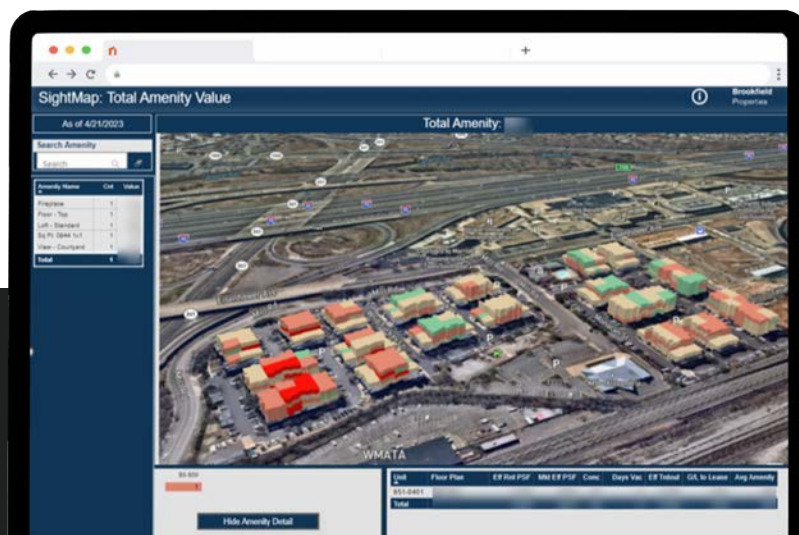
Notably, map-based visualization has allowed Brookfield Residential to identify missing amenities on units to increase rental revenue. It also highlights long-standing vacant hotspots, which raises attention for review so the Brookfield Residential team can take appropriate action quickly.

"We can really see what's actually happening at a building versus trying to sort through all the data and figure out, for example, what's

common among the units that aren't leasing," Smith said. "Actually seeing those outliers allows us to recognize when we have a problem with availability or vacant units in a certain location."

Brookfield Residential has maps that look at numerous facets, from amenities and availability to occupancy and days on market, and the ability to filter the maps by floor plan, floor level, unit stack, bedroom count, market rent or affordable homes. Numerous departments within Brookfield Residential, from data science and revenue management to development, now have a much deeper understanding of location-specific influences on the trends, patterns and outliers they see.

"Engrain's Power BI plugin coupled with the REBA BI dashboard makes it so much easier to analyze the data and take a more proactive approach," Smith said. "We're able to address leasing challenges quicker and also better anticipate our turns and exposure. Since partnering with both Engrain and REBA, we've spent more time looking at the data and actually understanding what it's telling us versus digging through the data and attempting to understand. We can quickly adjust and make confident decisions. This really helps us maximize our revenue and identify those opportunities."



ENGRAIN

INTENTION IN EVERYTHING

Engrain is the leader in interactive mapping technology and data visualization software whose advanced integrations and technical flexibility offer solutions for any multifamily technology stack. Clients use Engrain products to engage prospects and residents, analyze and improve operating performance and increase NOI through operational efficiency.

The company is headquartered in Denver, Colorado. For more information, visit [Engrain.com](https://engrain.com).



Real Estate Business Analytics is a data analytics software company on a mission to change how the multifamily industry uses data. REBA helps leaders ask insightful questions about their business by giving them access to all their data in one central location. We do this by offering a suite of solutions that gather data & deliver insights so you can unlock your aha moments and make better decisions, faster. With REBA, you can eliminate Excel hell, bad data, excess cost, and analysis paralysis with tools built by multifamily for multifamily.