

REBA COMP DATA POV

November 2024

With all the attention on algorithmic pricing and its use of competitive data, we thought it would be a good idea to discuss the appropriate role of comp data in rental housing pricing and revenue management—its history as used in legacy systems, what we’ve learned through almost 25 years of operating legacy systems and what operators and owners should do going forward.

Why Comp Data Was Used In Legacy Systems

The basic theory behind using comp data is based on the concept that apartment rentals are a “high substitution sensitive” product, meaning that it’s easy to substitute one competing product for another. We therefore need to have an understanding of what the comps are doing to properly price our own product.

While seemingly obvious, it turns out that we don’t really need to know exactly what the comps are doing to still understand if our pricing is too high, too low or “just right.” But more on that later. For now, we’ll focus on why and how comp data is used in the two main legacy systems.

LRO® Design

When we designed LRO in 1999-2001, we took exactly that approach to the importance of substitution sensitivity in the very first version of that software. Comps were used to calibrate where we were pricing, and the optimization math started from that point.

Yieldstar® Design

YieldStar (and thus AIRM® as well) took an even more aggressively comp-dependent approach. Whereas LRO used a blended “market composite” metric to aggregate a range of comp prices and use them as a starting point from which pricing went up or down, Yieldstar used the range of comp prices to define the space in which recommended rents could occur. Leasing ahead of pace meant intentionally pricing at the higher end of that range while leasing lower than pace meant pricing at the lower end of the range.

An interesting artifact of these different approaches meant that LRO could function without comp data as long as users gave it a user-defined Market Composite metric to represent that starting point while YS/AIRM can only function where there is a range of comp data.

What We Learned (& What's Changed)

Over the course of our twenty-five years of designing, developing, operating and supporting rental housing PRM software, we have definitely learned a few things we wish we knew back in 1999 when LRO was first being developed.

We don't want to be constrained by comps.

The very first version of LRO had an unfortunate limitation. Because the comp rents defined the starting point, they also defined the floor and ceiling (or range) of possible price recommendations. That meant if comps didn't move then at some point neither could our pricing. Later versions of LRO corrected for this; however, we believe YS/AIRM still suffers from this to at least some degree.

Comp data is notoriously unreliable and/or inaccurate.

Different websites/ILSs can have different pricing, timing and other issues can cause website rents to be incorrect and operators can often have hidden concessions or price breaks particularly when they are desperate to capture more leases.

Sales mixes can radically affect apparent pricing, particularly in place where there are high unit amenities.

For example, we frequently see issues in New York City, San Francisco and other premium commercial business districts where the price for a particular unit type goes up or down even hundreds of dollars one day to the next. However, it's not because the underlying base rent changed—it's because a low or high-floor unit leased leaving only the opposite available thus showing a very large change in minimum price that has nothing to do with the underlying pricing fundamentals.

Poor understanding of inputs.

After the accuracy issues, the next biggest challenge with relying too much on comp rents is that the units are not as fungible as we might believe they are—or at least we need to normalize the price to be apples-to-apples on size and other

unit and community amenities (we called these "positions"). We also shouldn't count all comps as equal since each comp does not compete equally with us with respect to how much they can take away demand (we called these "weights"). The theory behind capturing weights and positions is easy; the ability to actually accurately assess and capture them? Not so much.

It's hard to collect accurate comp data.

- Given the concerns over even the perception of coordinating pricing, "call arounds" are really no longer viable. Even when they were done in the past, they were often not accurate as competitors may choose to mis-quote their rents. Secret shopping can counter-act that for individual instances but doesn't scale.
- Screen scraping is clearly a better approach and many in the industry have embraced it. It is not, however, a panacea. Having been involved in many screen scraping projects, I found three significant challenges: 1) different websites can have different prices for the same home, 2) getting concession data is particularly challenging as concessions are typically unstructured data (and there can be non-cash or non-rent concessions, e.g. physical gifts, gift cards or waived fees) and 3) screen scraping typically violates a website's Terms of Service so you're always open to being denied access or receiving a "cease and desist" letter.

Small comp counts can be an issue.

When there are not many (or any) comps, relying on comp data becomes a challenge. This can happen with some frequency on unit types like studios and/or 3- and 4-bedrooms in markets where not all comps have them. A related issue is when comps often don't have any available units in those unit types as they only have a few of them.

While we've learned all of the above, we've also seen several relevant changes in the 25 years since algorithmic pricing's introduction to our industry.

- We are much more confident in current pricing, so any initial system calibrations can be done with Recent Average Rents (RARs) as effectively as with comp data
- With digital marketing and modern CRMs, we collect more guest cards so we have much more reliable internal demand data
- The industry is much more comfortable with analytically-driven processes, so we are less dependent on comp pricing as a psychological crutch

Before we go into what we do about comp data in a contemporary rental housing PRM system, let's take a brief detour to talk about any use of comp availability as part of a pricing algorithm.

- It should be obvious, but we'll say it anyway. Any use of non-public data is a non-starter as it falls directly afoul of the current and growing list of jurisdictions that are banning the use of non-public competitor data in any rental housing pricing algorithm
- We could infer availability from websites; however 1) we still need to know the total inventory by unit type and 2) counting available units on a website is often not an accurate count of availability. Smart marketers do not always put all their inventory online, particularly if availability is high as it just signals to prospects they have buying power
- Even if we had accurate comp availability, it's notoriously challenging to translate that information into price changes without making a series of assumptions about where our pricing belongs and how important each individual competitor is.

In short, comps can give us a sense of where the game might be played, but relying on comp data as a key element of a pricing recommendation algorithm is just too simplistic and too fraught with errors and assumptions.

What To Do

Fortunately, we don't need to use comp rents in a properly and intelligently designed pricing system. As discussed earlier, RARs are more than sufficient for initial calibration, and we can rely strictly on our own data (i.e. 1st party data) for demand and supply cues to make price recommendations. Such an approach is plenty responsive, based on entirely accurate data and, perhaps most importantly these days, is "black letter" legal.

But you don't have to take our word for this as there are multiple proof points from our history with PRM systems

- The PRM team at Archstone used LRO in NYC with no comp data. We measured the same performance there as in other markets which led us to expand the practice into all our top-tier CBD markets (e.g. San Francisco, LA and Seattle). We knew from conversations with other LRO users in those markets that they were doing the same.
- During our consulting years, we built a bespoke pricing system for a large scattered-home SFR owner/operator that did not explicitly use comp data in the pricing algorithm. They outperformed the comps when using this system.
- With our PRM product, REBA Rent™, we conducted an "A/B" test vs LRO with a large publicly-traded owner/operator and actually performed slightly better than LRO.

So is comp data useful at all?

In our experience, there are two scenarios where it's good to have (publicly available) comp pricing

1. Operators love to talk about comps. While most PRM professionals in rental housing agree they over-index on that, it's still very useful to have current and historical comp rents when having conversations with operators. As long as we don't fall prey to feeding their over-reliance on comp rent comparison, it helps us "talk in their language."
2. As mentioned above, while we can't collect precisely accurate comp rents and relate them to exactly where we should price, we can collect data and map it in ways that give us a general approximation. Therefore, if our system recommended prices more than a certain distance from our educated guess at the market composite, it's worth alerting a PRM user that they should probably take a look.

The allure of using comp data in pricing algorithms is obvious. Hopefully, after reading this you have a better understanding of why comp data is more "fool's gold" than "gold." Even without the recent legal and regulatory issues, it simply has no place in rental housing pricing algorithms given how impossible it is to collect precisely accurate comp rents and relate them to precise changes to our rents; and since we can build equally good (we would argue better) algorithms without it, there's simply no need. Comp rents can be useful for conversations with operators and as an alerting mechanism, so let's keep comp rents where they belong!

About REBA

Real Estate Business Analytics (REBA) is on a mission to change how rental housing uses data through a Connected Analytics platform. REBA creates an analytical ecosystem, seamlessly connecting your transactional systems of record into a single source of truth providing key predictive analytics to enable business intelligence, budget and pricing analysis at the speed of curiosity. This platform fosters cross-functional collaboration driving engagement and unity around common goals. REBA's platform empowers organizations with deeper insights to make smarter decisions, faster, leading to enhanced performance & increased revenue. Learn more at www.getreba.com.

REBA Rent

REBA Rent™ is a contemporary pricing and revenue management system designed to empower modern revenue managers and enhance profitability through innovative features and a unique focus on the total cost of ownership. Developed to address the evolving needs of today's rental housing professionals, REBA Rent embodies a modern approach to multifamily revenue management software, leveraging advanced analytics and strategic insights. The system is purpose-built to support the intricate demands of the multifamily sector that leads not only to a more efficient and more effective PRM strategy, but also one that more naturally and intuitively builds trust with operators and asset managers.

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