# Resource Responsibility (from UNITS Vol 34 Issue 8)

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## If residents pay for what they use, they're more likely to conserve.

It seems as if utility bills inch higher every month. Water, electricity, natural gas and other natural resources are not only expensive, but they are non-renewable resources. Conservation is one way to combat these trends.

Conservation is using less of a resource by changing behavior. The first step in any conservation strategy is assigning responsibility to those consuming the resources. Conserving resources includes many of the core utility management strategies employed by multifamily owners and managers today, such as metering, ratio utility billing, vacant cost recovery, unit cost recovery and converged billing. Most current multifamily housing invoice processing solutions support these efforts.

Admittedly, many owners first embraced conservation as a means to transfer costs from their bottom line to residents. Regardless of the original motivation, aligning the responsibility for a resource to those consuming it is a fundamental tenet of sustainability. It is one of the best methods of encouraging socially and environmentally responsible behavior. Residents are far more likely to turn down a thermostat in the winter if they are responsible for the cost. Submetering water and allocating the utility cost to the residents greatly reduces a community's consumption.

In practice, the best method for encouraging conservation at a multifamily community depends on whether the resource is

measured at, and billed to, each apartment by the utility provider or whether the utility provider measures and bills the entire community and the community then allocates the responsibility to each apartment.

This article discusses the ways in which apartment providers can allocate resource costs in either scenario, as well as how they can most efficiently bill for and collect those costs from residents.

### **Utility Master Meters**

When resource consumption is not measured and billed by a utility provider at each apartment, the owner must assign responsibility. This is typically the case when the utility provider places one or more master meters onsite.

In most instances, the ideal solution is placing a submeter at each apartment. Submeters are the most accurate and fair solution to assigning responsibility for usage. Residents are charged for their actual usage by a resource management partner, and they incur the savings or additional cost resulting from their consumption behavior.

The return on investment for many submeters can be measured in months. However, the cost of submeters varies widely by type of resource, community mechanical-electrical plumbing (MEP) design and jurisdiction. For example, a water meter for a 1 1/4-inch water pipe can be more than twice the cost of one for a 3/4-inch pipe.

Many underestimate the challenge of installing, reading and maintaining code- and regulation-compliant meters. Admittedly, innumerable suppliers are willing to install meters at any community. However, the list of partners willing to install, read and maintain meters correctly is far smaller. Most large owners and managers routinely inspect and assume they will have to replace numerous meters on any community acquisition.

Meter reads cost about \$0.30 per meter per month for automatic and \$0.80 for manual reads. Depending

on the type of meter, maintenance costs between \$0.50 and \$1.00 per meter per month. In most but not all jurisdictions, these fees can be included in the bill to the residents for the resources.

Remember that meter installation alone is not worthwhile. The value of submeters is only realized as meters are correctly read over time and combined with billing and payment solutions. Any decision regarding submeters should be part of an organization's overall resource management strategy.

Another option for reallocating a resource expense is Ratio Utility Billings (RUBs). RUBs generally utilizes statistical analysis of varying complexity to assign proportional responsibility to each unit. One standard program for allocating water is a RUBs 50/50 program. In this program, a resource management partner calculates half of a unit's monthly charges based on the size of the unit and the other half based on the number of occupants.

The RUBs method costs far less than submeters to deploy and is an effective cost allocation tool. However, it does not directly assign responsibility to those consuming the resource. Residents receive a fraction of the savings or cost associated with their resource consumption behavior. It assigns cost, but does not promote conservation as well as submeters.

As with almost every facet of resource management, the use of submeters and RUBs is heavily regulated. More and more local and state jurisdictions prohibit the use of RUBs. Other jurisdictions inexplicably continue a ban on submeters—often while simultaneously promoting conservation. At each community, an owner or manager must verify the local laws and rules before embarking on any method of resource allocation. Rules differ dramatically from jurisdiction to jurisdiction, and one should never assume that current practices are compliant.

In particular, an owner or manager should be extremely concerned with any resource management strategy that promises "profit." While there are exceptions, a community generally cannot directly profit from resource management efforts. Violations of regulations or code can be costly, especially if fines are assessed for every infringing bill.

## **In-Unit Utility Meters**

In situations where the utility provider bills residents directly for a utility resource, it is the residents' responsibility to establish service in their names before they move in. However, not all residents remember to establish service before they move in. They may also transfer service out of their name prior to the end of their lease, frequently when they move out early.

Continuous Service Agreements and similar arrangements switch the service back to the community when this occurs. While necessary to facilitate the turn and leasing of units and required in some states, these agreements make the community responsible for any gaps in resident responsibility at the beginning or end of a lease term.

A primary concern for most apartment owners is recovering these expenses. Vacant Cost Recovery (VCR) is the process of identifying and billing resource expenses that are not included in the rent but are paid by the community during a resident's lease term. This is sometimes called utility theft, though the inference regarding the residents' intentions is questionable at best.

These costs add up quickly for most communities as residents move in and out without promptly changing utility accounts over to their names. It is not uncommon for these costs to exceed \$100 per month per affected unit.

A VCR solution from a resource management partner enables a community to promptly identify and bill these costs to the resident. The speed of identifying and assigning these costs dramatically affects a community's success at mitigating the costs and collecting the payments, especially when the resident is moving out of the community. However, an owner or manager must balance the benefits of identifying and allocating these expenses against the administrative cost of the VCR solution.

Unit Cost Recovery (UCR) refers to identifying and billing resource expenses that are measured and billed per unit by the utility provider, but included in the rent and paid by the community. Residents then pay amounts that are in excess of their allowance—a set amount of consumption built into the rent.

Allowances are normally set with the help of a resource management partner via statistical analysis that determines normal usage by the majority of the residents, which is then rounded to simplify leasing. By establishing limits on what is included in the rent, allowances encourage resident conservation and sustainable behavior by assigning the cost for above-average consumption to the users of the resource.

When resources are included in the rent, allowances and UCR are essential to fostering responsible consumption and mitigating risk. The apartment industry is replete with stories of gross resource waste by residents when they have no accountability for their usage. This is particularly true for student living communities, where residents are less accustomed to being responsible for their resource consumption.

Though less common, UCR also can apply to communities that have master meters and community submeters at each unit when resources are included in the rent. The allowances stay the same, but the costs are allocated through the meter reading process instead of through automated invoice processing.

## **Billing, Collection and Payment**

Regardless of whether a submeter or RUBs method is used, whether VCR or UCR analysis is being utilized or whether the underlying resource is natural gas or chilled water, it is critical that bills sent to residents are collected. Traditionally, resource management partners sent and collected individual bills for resources. These bills were almost identical to those sent to residents by the utility providers. The industry logic was that these were activities best handled by professional bill collectors, while the onsite management team focused on leasing and other operational tasks.

In practice, no owner or manager can cost-effectively avoid every aspect of billing and collections. Worse, with individual bills and off-site collections, onsite teams become responsible for pursuing bills that their resource management partners could not collect. These bills can be many months in arrears, often because the resident has moved. The stated collection rate for individual bills and offsite collections is usually 85 percent, with actual rates far lower.

Uncollected bills add up very quickly. A mere 5 percent difference in collections for unit electric bills of \$100 per month equates to almost \$100,000 for a 250-unit community over 10 years (6.5 percent discount rate, 90 percent occupancy).

As systems have improved, the largest resource management partners and most large owners and managers have moved to onsite collections and convergent billing. A converged bill consolidates all resident accounts into one monthly invoice. The resident pays the community one sum for rent, premiums, resources not billed by utility providers and any other charges.

For most companies, converged billing and onsite collections increase collections rates to 95 percent to 100 percent, generally with less time and effort by onsite staff than when the bills were collected offsite. The management teams' level of effort is effectively the same as collecting rent. E-billing promises to further reduce the environmental impact of paper bills, decrease cost and increase collection rates even further.

Many owners embraced cost allocation to reduce their own budgets. Nevertheless, when used properly, these tools form the foundation of a multifamily conservation strategy.

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## Resource Management: A Guide to Reducing Cost and Enhancing Sustainability

#### **About This Series**

Even the largest and most experienced owners and managers struggle to coordinate the various aspects of a resource management strategy and are generally dissatisfied with available tools and associated costs.

In a series of articles over the next several months, the authors and peers at Post Properties, Archstone, UDR, AIMCO and Riverstone will review these elements and explain how they comprise a comprehensive resource management strategy for a multifamily community or portfolio. In the course of the discussions, they will not recommend specific products or vendors. In addition, they may allude to products and services that may be in development, but not currently available.

The articles will discuss the four elements of comprehensive resource management:

- Part 1 (July 2010, pp.62-65). Resource Intelligence: the foundation of resource management, a comprehensive and detailed understanding of resource consumption.
- Part 2 (August 2010). Conservation: encouraging socially responsible behavior, reducing resource usage and lowering costs by assigning responsibility to those consuming the resource. This includes much
- of today's multifamily metering, invoice processing, billing and payments.
- Part 3. Efficiency: using less of a resource to provide the same level of service in order to minimize the environmental impact and lower cost. Examples are switching out incandescent bulbs with CFL or LEDs or rightsizing a pool or fountain pump.
- Part 4. Procurement: contracting or managing the purchase of resources to minimize risk, lower cost and enhance sustainability. Procurement covers everything from reverse auctions, to rate/bill reviews and tariff strategies.

In Part 1 ("Resource Intelligence," July 2010, pp. 61-65) of this article series, the concept of automated invoice processing was discussed. A related concept is automated owner payments, which refers to a community's payment to utility providers, generally through electronic funds transfer and software/data integrations. These payments may be for utility resources that are consumed in the office and common areas, in vacant apartments or in occupied apartments on behalf of residents for resources included in the rent.

Any community manager can understand how frustrating it is to manually pay the utility providers' invoices in a timely manner. While the stated time to pay bills is adequate, in practice a community must process and pay these bills almost instantaneously to avoid late fees and deposits. For communities that include resources in the rent and often receive hundreds of bills per month, it is nearly impossible.

Combined with invoice processing, automated owner payments enable a community to pay utility provider invoices via various automated payment mechanisms. The automation significantly reduces the cost and time a community spends paying invoices, dramatically

reducing late fees and security deposits. Using electronic payment solutions further speeds payment and enhances sustainability.

Automated resident payments are the flipside of automated owner payments. This refers to an automated payment solution that allows a resident to pay the owner via various methods, such as checks, debit cards, credit cards and money orders. These payments are electronically processed and posted for the community. Besides being a valuable amenity for the community, an automated resident payment

solution further improves collections rates and time savings while also reducing environmental impact—particularly for online and other electronic payments. — J.B., K.M. and H.P.