

Multifamily Utility Benchmarking Webinar Series

Using Software and Entering Data for Multifamily Utility Benchmarking May 4, 2017

Scott Ledford: Welcome to the fourth webinar in HUD's multifamily utility benchmarking webinar series. In this webinar we'll talk about using software and entering data for multifamily utility benchmarking.

The logistics for this webinar are the same. Please submit any technical issues with the webinar technology through the chat box and to the host, as well as any questions related to the content of today's webinar should instead be submitted through the Q&A box and to all panelists. We will try to get to individual technical issues addressed during the webinar and have time set aside later in the webinar to address questions related to the content.

Julia Hustwit with the U.S. Department of Housing and Urban Development continues as our host for this webinar series. My name is Scott Ledford with ICF and Andrew Schulte is the new voice you will hear today.

We're now on to the fourth webinar in the six-part series of short weekly sessions so there are only two more left to register for. Recordings, transcripts and copies of the slide decks are already posted for the first three webinars and these tend to become available before the next webinar so it is still possible to review past webinars and be completely up to speed before next week's session.

Recall that the content of each webinar is different and cumulative which means we'll probably talk about some things today that assume a level of knowledge or at least familiarity based on the previous webinars; and yet you will still hear us mention that we'll talk more about some other things in the upcoming webinars.

In today's webinar we'll get into more details about actually using the Energy Star Portfolio Manager software for your multifamily utility benchmarking efforts; including guidance that is relevant specifically to multifamily housing providers; the three options Portfolio Manager has for entering the data you have collected; tracking and managing your owner-paid and tenant-paid utility data; and addressing specific multifamily data issues like vacancies and tagging properties in Portfolio Manager.

I'll get us started with an overview of Portfolio Manager and Andrew will take us deeper into the software and I'm specific to multifamily users in a few minutes. This slide may look familiar to you from the first webinar, where we suggested that one of the things your organization could do to get started with utility benchmarking is to become acquainted with Portfolio Manager.

Whether or not you have started to do so at this point we're going to get into greater detail about Portfolio Manager today because it is the tool through which multifamily housing providers involved in any of HUD's multifamily utility benchmarking initiatives should measure track and report their data.

There are four basic steps that need to be completed within Portfolio Manager in order to benchmark a multifamily property. First, you need to tell the software about each of your properties, some descriptive information as well as some more specific property use details. Next, in a separate part the tool you need to provide the utility consumption and cost data for the whole property. We've talked about what this means in previous webinars – all utility consumption and costs required to operate the property across all fuel types including both owner and tenant-paid accounts. Last week we also talked specifically about four methods for obtaining such data, including aggregation and sampling

With this property and utility data the Portfolio Manager software tool will then be able to calculate and return key metrics about the performance of each of your properties, the third step on this slide. This output can include energy use intensity, water use intensity, utility consumption and costs, and associated greenhouse gas emissions. When you have entered complete data for a property you should also be able to obtain the Energy Star 1-100 score for it, which is an indicator of how that property compares to multifamily properties across the country

The final step is to use the reporting functionality and Portfolio Manager to do a deeper analysis of each property and across your portfolio. We'll also talk more next week about how you can use the functionality built into Portfolio Manager to share your benchmarking data and/or results with other entities including HUD. Now, remember that there are these four basic steps as we'll start getting into more details in the coming slides.

So there are the four basic steps from the previous slide and these are the three primary options for getting data into Portfolio Manager, which is essentially about accomplishing the first two steps. Got it?

Whatever offer you choose to get data into Portfolio Manager organizing the information essentially beforehand will make the process more streamlined. In the last couple of webinars we've shown you the new multifamily utility benchmarking plan template and a tenant-paid utility data sampling calculator, which are two entirely optional tools that are interconnected and can help you to do that organizing and streamlining. I'll talk about each of these data entry options a bit more now.

Manually entering the property and utility data into Portfolio Manager may be the easiest approach for housing providers with more simple portfolios. To add one property at a time or update the data for one appropriate at a time, the relevant data can simply be keyed directly into Portfolio Manager following the step-by-step guidance built into the software. We've just gone through tax season; I'm guessing that at least some of you are familiar with comparable step-by-step guidance and data entry when using your favorite tax software.

Once the property has been created in Portfolio Manager there is an ad meter wizard, which then provides guidance on how to enter energy and water meters for that property. You'll first enter basic information about the meter types then go on to add the actual monthly utility consumption and cost values.

The spreadsheet output option can be attractive for housing providers with more complex portfolios and those who are using Excel or other software to track utility data. When you use this option you will need to organize the data you wish to upload to Portfolio Manager into the format's required by the spreadsheet upload templates that are produced by the software. A primary benefit of this option is it allows you to work with multiple properties and meters at once, rather than just going through the step-by-step property by property manual option I just described. Notice there are five core functionalities within Portfolio Manager that can be accomplished with spreadsheet uploads.

Now if you choose to use the new multifamily utility benchmarking plan template you will have a bit of a leg up because there is functionality built into that tool which can directly export the data you have collected into several of the relevant Portfolio Manager upload spreadsheets; thus helping to reduce data entry efforts into Portfolio Manager at this point.

Web services are the third option for getting utility benchmarking data into Portfolio Manager which can also reduce data entry efforts and errors. In this method a third-party populates utility benchmarking data directly into Portfolio Manager on behalf of their customer or client. These third parties could be utility providers offering this option as a general customer service solution, or utility management service providers under a fee-for-service arrangement.

We've pointed out in previous webinars that there are numerous utility providers across the country which offer their customers the ability to use web services to deliver data directly into Portfolio Manager. Recall from the last webinar especially that HUD has recently updated the multifamily utility data collection database and EPA maintains a map and list you can use to check whether the utility provider for a particular property offers this service. Both of these resources are linked to from within the new toolkit.

If you find utility provider does not offer automated data transfer and you wish to explore this option further there are also a large number of utility management service providers around the country who support this option. One source you could check out is the Energy Star list of most active service providers.

Even if your organization does choose this option for data entry, it is still important to go through the steps of developing a holistic utility benchmarking plan. For example, while a third party may be able to send utility consumption and cost data directly to a property's Portfolio Manager record, you will still need to provide them with the necessary guidance to ensure that a correct data goes into the correct records for the correct properties within your organization's Portfolio Manager account.

Energy Star provides a comprehensive set of guidance materials that range from how-to guides to five-minute task specific demonstration videos and monthly webinars that demonstrate all

aspects of the software tools functionality in 60-minute sessions. We can't replicate or demonstrate all those resources for you within these webinars but we do encourage you to check them out for yourself, and of course, there are links to them from within the new toolkit.

Especially if you are new to utility benchmarking and Portfolio Manager these resources can help familiarize you with this software tool and its core functionality you will then be better prepared to tackle some of the nuances of utility benchmarking for multifamily properties in Portfolio Managers, which I'm going to turn the microphone over to Andrew to discuss and demonstrate for you now.

Andrew Schulte: All right. Well, thanks very much, Scott, and a big hello to everybody on the line.

In the previous slides Scott talked about Portfolio Manager at a high level including the extensive resources that Energy Star already provides on core tool functionality. Now I'd like to discuss some of the more specific considerations involved in benchmarking multifamily properties in Portfolio Manager.

All right. To begin, let's discuss the specific information required by Portfolio Manager in order to fully benchmark a multifamily property. On this slide are the items that are required to benchmark multifamily properties, and in particular, for a property to be able to receive utility performance metrics like energy and water use intensity as well as the Energy Star 1-100 energy performance score.

In addition to these fields there are additional optional fields in Portfolio Manager that you are encouraged to fill out. These don't factor into the 1-100 score or other utility performance metrics but they may help your organization to manage and compare properties. These fields include resident population type, number of laundry hookups in all units, number of laundry hookups in common areas, percent of building that can be heated; and percent of building that can be cooled.

Also, if your property is HUD public housing, HUD assisted, HUD insured, USDA rural housing, or otherwise government subsidized, you should enter yes in the data field for government subsidized housing. A little bit later on when we go to a live demo I'll be able to show you where these values appear in Portfolio Manager.

Okay. Now let's talk about how to define your property in Portfolio Manager. As we discussed in previous webinars, multifamily housing providers are encouraged to benchmark at the property level even if there is more than one building that makes up your property. This means that if you are establishing a multi-building property in Portfolio Manager you don't need to create a separate record for each of the individual buildings. Instead you can enter a single record representing the entire property in which you will input the total property use attributes across all of the constituent buildings.

In the example shown here imagine that you have a single property that consists of three mid-rise towers, each with its own set of property use parameters as shown on the slide here. To

benchmark this property in Portfolio Manager you only need to set up one property record for which the use details will reflect the sum of all three buildings and we've represented that here in the graphic to the right. And again, in a little while we will show you what this actually looks like when you translate this data into Portfolio Manager.

Okay. Now next, we're going to talk about entering utility consumption and cost data at the property level, including how to reflect total cost and consumption from all of the individual buildings that make up a property. First, though, let's start by discussing a few basic principles about how Portfolio Manager deals with meter data.

Portfolio Manager allows users to define any number of meter records to reflect a wide array of energy types as well as water. However, as you learned in last week's webinar a meter record that you set up in Portfolio Manager doesn't need to equate on a one-for-one basis to a real-world physical meter at your building. Instead, a meter record in Portfolio Manager can be set up as what we call a virtual meter that captures the aggregate total consumption for a given utility type and/or payor. So if your property has 100 electricity meters, for example, you're certainly welcome to enter each of them into Portfolio Manager and track them independently, but you don't have to. At the end of the day it doesn't matter to Portfolio Manager whether your property has one meter or 100 as long as you are capturing total consumption for each utility type used in the operation of the property.

So as a general rule it's typically in your favor to set up and manage as few meters in Portfolio Manager as possible while being sure to fully account for the different utility types and payers. At a minimum you must set up at least one meter per utility type consumed at the property. However, HUD encourages you to differentiate between tenant-paid and owner-paid utility data at a property wherever possible. With this in mind, if you're going to go the virtual meter route you may find yourself establishing up to two meter records per utility type in Portfolio Manager.

Okay. Now, let's look at our example property from earlier, and you can see this schematic diagram up on the slide. For our purposes we're pretending that there is an individual tenant-paid electric meter for each of the 380 units of this property; along with one owner-paid meter for electricity at each building; one for gas, and one for water. Now if you really wanted to, you could go into Portfolio Manager and you could create 383 electric meters, three gas meters and three water meters; and technically speaking, Portfolio Manager would be able to work with that but updating that information on a monthly basis could quickly become pretty resource-intensive.

Instead the recommended virtual meter setup in Portfolio Manager for this property would be four meters – one meter that represents the aggregate consumption of the 380 tenant-paid electric meters; one that represents the aggregate consumption of the three owner-paid electric meters; one that represents the aggregate consumption of the three owner-paid gas meters; and finally, one that represents the aggregate consumption of the three owner-paid water meters.

Now, this is just one example for this demonstration property that we have created today and in fact there are any number of variations on how you might set up the meters at a given property, and this would depend on the methods that you've used to obtain consumption and cost data for

each utility type at your property, as well as the level of granularity at which you're seeking to track your property's information. Remember, it's not wrong to track meters on an individual basis if you have access to that level of data and if you wish to do so, but it's not required in order to fully benchmark your property. And in fact, depending on the utility data collection that you're using, you may only be able to obtain aggregate data for one or more utility types.

And speaking of which, as we learned in webinar 3, utility data collection method D – the sampling approach – is one of the approaches that will result in an aggregated sum of multiple meters. In this case you will be using a sample to estimate total tenant-paid utility consumption for each month. This slide shows an example of how you would perform this calculation. I believe you saw this slide in last week's webinar, and also this image is also included on the HUD utility benchmarking toolkit website. But wanted to point out that from the results of this sampling calculation it's the monthly totals that you would enter into the appropriate virtual meter in Portfolio Manager when tracking tenant-paid energy consumption for for a property. And of course as Scott noted earlier, if you're using the tenant-paid utility data sampling calculator, a lot of this work including the the calculations can be done for you.

All Right. So on this slide we're showing you a few screenshots of what whole property data looks like when it's entered into Portfolio Manager, and that's intended so that you can reference these slides at a later point in time. At this moment though we'd like to go live to Portfolio Manager to show you what the data actually look like in the tool itself, and then we'd like to move on to point out a few more nuances associated with benchmarking multifamily properties. So if you will just give me a moment I am going to click over to share my screen and I will give this a moment to come up.

While it's loading I'll note that as Scott noted we don't have enough time today to go through kind of an A to Z soup-to-nuts example of benchmarking a a multifamily property from beginning to end; and in fact, if this is something that you are looking for some of the training resources that Scott pointed to earlier that are that are offered by Energy Star I can provide you exactly that. But for our purposes today I took what we've been calling, "the cooking show approach." We set up a sample building in Portfolio Manager so we've already gone through the process of entering data so now you can see how a fully benchmarked building looks in Portfolio Manager.

So we just talked about entering whole property use data and whole property consumption and cost data into Portfolio Manager, so I did want to give you a sense of what this looks like what it is in the tool. So what we see here is the summary page for the sample property that I've created for our demonstration purposes. If you click over on to the details tab for this property you'll see that there's a section that outlines property uses and use details.

So if I go ahead and I expand this caret right here, this is where the required and optional property use data gets put. And we spoke about this a few minutes ago; again, we're using our sample three building property that we've gone ahead and we've aggregated into one single property record. And again, the numbers that you see here are consistent with the the numbers that we made up and showed on on prior slide.

You'll note that there are six required property use values, including gross floor area, total number of residential living units, the distribution of those living units in low-rise, mid-rise, and high-rise settings, and then the number of bedrooms. You will need to enter in all of those values in order to benchmark your property. You'll see here as well that there are a number of optional fields as we discussed earlier, including resident population type, whether or not this is government subsidized housing, number of laundry hookups in all units and in common areas; and then the percent that can be heated or cooled. But again, not a ton of fields that need to be entered, and they are all gathered in this one spot in Portfolio Manager, from where you can go in and perform different functions on them. If you need to update or correct any of these values you can do so from here. But again, this is just the point that this is the example building we described earlier and it does reflect the aggregation of a three-building property into one property record in Portfolio Manager.

Now I want to show you a little bit of what the energy and water data look like in Portfolio Manager. As you recall, we talked about going ahead and entering four meters for this property. And you can see here on the energy tab that what we've done is we've gone ahead and we've set up two electricity meters, one owner-paid and one tenant-paid; and then one aggregate meter for natural gas. And then over here on the water tab you can see that we have set up a single meter for owner-paid water. In this case we're assuming that it's a combined indoor and outdoor water meter.

So this is the point the tool where your meter records are housed and what you'll note is on both the energy and the water tabs there is a summary graph depicting the total consumption for each utility type. On the energy tab you'll see that I have a graph that includes both natural gas and also electricity, and you'll notice that the graph for electricity is summed together so that it reflects both the owner-paid and the tenant-paid portions of that total electricity consumption.

Okay. So while we're talking about meter data, it is important to remember that if you have used sample data to obtain total tenant-paid utility consumption – so in other words, if you've used data collection method D – you will need to mark these entries as estimated in Portfolio Manager. So to do that, let's go here and let's dig into our tenant data electricity meter. This gives you a quick glance at what complete energy consumption data looks like in Portfolio Manager, and any utility meter, whether it's electricity natural gas or water will look like this. It will be a month-by-month breakdown including start date, end date, usage, cost – which I haven't put in for this particular case but you would want to enter.

You'll also note that there is this column for estimation. Now, if the meter that you are entering if the consumption value comes from sample data, it will be necessary for you to indicate that those values are estimations. What you do is quite simply come in to your account click the boxes to indicate that these are estimations and then go ahead and click "Save bills." So clicking that estimated data flag will not prevent you from being able to generate metrics, including the Energy Star score; however, please be aware that if your building scores above 75 and you have used estimated data you won't be able to apply for Energy Star certification.

On the other hand, note as well that if you are aggregating actual meter consumption data from multiple meters or accounts into a virtual meter you don't need to check the boxes for estimation.

Another question that comes up is how to deal with vacancies when benchmarking your property. Now, there are always going to be vacancies in multifamily properties. Vacancies may be short-term such as when housing units turn over to new tenants, or they may be longer-term such as when housing units are being renovated. The goal of utility benchmarking is to track the performance of a property under normal operations. Since short-term vacancies fall into the realm of normal normal operations for multifamily properties there are no adjustments that need to be made to utility data to account for those.

Now, longer-term vacancies don't fall into the realm of normal normal operations however HUD does similarly recommend that no adjustments be made to the utility data to account for long-term vacancies. Instead, housing providers should maintain accurate information regarding the occupancy rates of their of their properties in Portfolio Manager at all times. In this way it will always be possible to understand how the occupancy rate affects the property performance that's shown being shown in your metrics.

So there's an easy way to keep this information up to date in Portfolio Manager. In order to specify occupancy information you would come over to the details tab and you would go into the area that says "basic information" and what you can do here is you can go ahead and you can edit this and what you want to do in general is to make sure that the occupancy that is showing for your building reflects the average occupancy over the 12-month period being benchmarked. So right now I've got a demo value of 95 percent in here but let's go in and click Edit and you'll see a basic information page about your building, including an area where you can update the occupancy value.

So by way of example, let's say you're benchmarking for the 2016 calendar year and let's say you had six months of 80 percent occupancy and then you had six months of 90 percent occupancy. If you wanted to calculate total occupancy for that 12-month period, what you do is you'd go ahead and you'd say, okay, that averages out to 85 percent occupancy. So you would update that information right here, you would go ahead and click "update property," and then when you come back to your property record you'll see that that occupancy value is showing right here.

All right. So one other item that we want to touch on, and this has to do with tagging your properties in Portfolio Manager with the appropriate IDs. When entering property data into Portfolio Manager housing providers should tag their individual properties with their HUD and/or USDA property IDs for easy reference, and this can be easily done from the details tab of your property record where we are right now. What you need to do is you need to scroll down to this box called "unique identifiers" and you'll go ahead and you'll click Edit. Then you'll scroll down to the bottom of this page where there's a box for standard IDs and what you'll do is you'll expand at the drop-down list and you will select the specific type of ID that you need to enter. For HUD assisted and/or insured housing you would want to provide a HUD property REMS ID; for HUD public housing you would provide a HUD property AMP ID; and for USDA rural housing you would select USDA property AMAS ID; and again that's all the way at the bottom of that list.

So let's just say I am going to select my HUD property REMS ID, you select that from the drop-down list, you enter in the appropriate ID number, and then you're good to go.

Now, one thing to note is that you may need to enter more than one type of standard ID. So for instance, perhaps you are in a jurisdiction that has a benchmarking mandate and they have assigned you a specific ID and they want you to track that as well in Portfolio Manager. You can do that by clicking on "add another ID"; you'd go back to the list in this case let's just say I'm in Boston and they require me to fill out a Boston Energy reporting ID, so I select that and I go in and I put the relevant number here in the field and then click Save. And you'll note that when we come back to the property details tab my property is now associated with two standard IDs, and at any point you can view what those IDs are, or if necessary, go into edit and/or add other standard ID fields.

All right. So that is the end of our planned demonstration today so I am going to click back over to the slides and I'll just give that a minute.

So coming back to the slide, so this is where we left off. Again, this slide right here is just a series of screenshots to help capture some of the data that we saw live today in Portfolio Manager. I do want to flip through the next couple slides because you'll see that these as well our topics that I just covered in my demonstration; however, we did want to provide these with static screenshots on the slides so that if you need to go back to these slides at a later point in time you'll remember exactly what we discussed. So again, information here on marking sample data as estimation; accounting for vacancies at multifamily properties; and tagging properties with HUD or USDA IDs in Portfolio Manager.

So as we wrap up this section on using Portfolio Manager to perform utility benchmarking for multifamily properties, we wanted to remind you that HUD's new tools – specifically the multifamily utility benchmarking plan template and the tenant-paid utility data sampling calculator – can help you to streamline many of the steps that we discussed today; including creating properties and meters in Portfolio Manager, as well as calculating estimated total tenant-paid utility consumption and getting it ready for entry into Portfolio Manager.

And finally, just a reminder that the HUD utility benchmarking toolkit contains a number of frequently asked questions that address specific and even more nuanced scenarios. And of course, the Energy Star website also contains an extensive set of FAQs about utility benchmarking in general as well as multifamily-specific items.

So with that I want to thank you for your time and attention today and I'll look forward to responding to any questions during our Q&A session and for the moment I will turn things back over to Scott. So, Scott?

Scott Ledford: Thanks very much, Andrew. So now let's briefly cover what's coming up next.

As I mentioned at the outset there are only two more webinars remaining in this series which are also scheduled for Thursdays at the same time, but they are separated by a break around a better building summit in Washington, DC from May 15th to May 17. The events and training section

of utility benchmarking website on the HUD Exchange is the place to register for the upcoming webinars as well as find the recordings, transcripts, and slide decks from previous webinars.

Now we'll turn to addressing questions already in the queue and remind you to submit any more you may have at this point. Andrew, do we have a first question?

Andrew Schulte: Scott, I am still cycling through these questions that came in while I was presenting. It looks like there may have been one that you wanted to start with?

Scott Ledford: Yeah. So maybe we'll start with this question. Justin asked a question, "When you do sampling is the monthly data calculated as the same figure each month? Would there be variation from each month?" So Julia or Andrew?

Julia Hustwit: Yeah. I can jump in on that one, and Andrew, please feel free to interrupt me if you have anything to add. But you would want to do your sampling on a monthly basis and ensure that you're reflecting the variation from month to month in your building. If you use the sampling calculator that we demonstrated last week the output screen and the tab that's titled Portfolio Manager or data for Portfolio Manager does provide the sampling to aggregate data calculations for you on a monthly basis.

And then Andrew, I wanted to – I don't know if you know the answer to this. I believe the case is that if you were to do your aggregation of your sampling data on a yearly basis and divide it by 12, would that or would that not mess up Portfolio Manager's calculations, based on weather normalization?

Andrew Schulte: Right. So it wouldn't it would still get you further than then they're not benchmarking at all, and it would reflect total energy consumption for the 12-month period. But it is good to have a monthly data or as close to monthly data as possible so that the tool can carry out weather normalization.

If you are taking a lump sum figure for the year and simply dividing it by 12, you are going to miss out on some of the weather normalization features. And so that's why we wanted to point earlier in the slide when we were when we were talking about sampling, to the fact that ideally when you're doing the sampling you're creating a a monthly sampled value for each month and then entering that into Portfolio Manager. And in fact, that's what the utility – the data sampling tool – does, is it breaks out that information on a month-by-month basis for entry into Portfolio Manager

Scott Ledford: Okay. Thanks very much. So I'm going to stick with the sampling theme for a moment. We we have another question that came in from Regan around sampling. "If we are using sampling, do we need to use the same units to sample thereafter, or can we switch units as long as we are using 25 percent of units?"

Julia Hustwit: So first of all, let me address that the 25 percent issue. There are different sampling protocols for different HUD programs. Those are listed on the benchmarking toolkit.

So don't just assume it's 25 percent as a rule of thumb. You want to definitely check to see what the number of your minimum sample size is according to the sampling protocol that you're using.

But in concept your question is really about do we need to use the same same units every year. The answer is it would be best to do so because then you're not going to get any kind of odd variations due to – especially when we're talking about sample sizes that are so small as are permitted by the sampling protocols. Your data quality obviously can be thrown by having one tenant in your sample that is an outlier. If you change up your units and the tenants that you're sampling from, those variations in behavior or even the location of the apartment in the building could change the outcome of your results, and that could cause you to think that there's a variation in your performance of your building that perhaps there isn't from year to year.

But you are allowed to switch units. It's not required that you use the same unit every year; it's advised that you do. Again, with sampling you're getting less quality data but it makes the easier for you, so it's a trade-off. Again, just as the way sampling versus whole building data is a trade-off in itself, switching units midstream is a trade-off. You can do it; it just messes up your data a little bit.

Scott Ledford: Okay. So we have another – it's really more of a comment from Bridget which it's an interesting comment so I think it's worth a little bit of discussion here. Bridget says that, "Although very intensive initially, aggregating multiple meters negates the effectiveness of managing energy use by individuals. If you can have the info automatically downloaded from the utility it would only be more time-intensive for the initial entry." So Julia or Andrew, care to comment on that?

Julia Hustwit: I can jump in, and then Andrew, always feel free to interrupt.

I think that's true – that's a true comment. So if you're an organization that has large properties and lots and lots of tenant-paid meters, at some point somewhere you're going to have to write down what those meters are if you want to aggregate them up. Or if you want to keep them disaggregated and put them into Portfolio Manager somewhere on a piece of paper – or ideally in the HUD utility benchmarking plan template that we demonstrated on the first webinar or the second webinar – you would be documenting all of those meters.

It's really a personal choice if you want to aggregate them to a virtual meter before you put them into Portfolio Manager. It does mean that – if you're using a spreadsheet upload, for instance, then obviously it's not really any more work for you to upload a spreadsheet that has lots of meters in it versus a few meters in it. If you were going to manually enter things it would be quite a big difference in the amount of effort to set up and then to continue filling out that information. But I don't expect people who actually have large amounts of meters would be doing manual entry in the first place.

The one thing I would say that's really a personal choice that might sway my decision on how to do my portfolio if I were engaged in practice is getting a feel for Portfolio Manager. If you feel like the user interface is easy and you can read it and you don't mind having hundreds of meters in there, then go for it; and especially if you feel that there's value that you're gaining by having

that information documented there and in one place without having to refer back to your utility benchmarking plan. That's great. Feel free to go ahead. But if you find this the user interface to be a little clunky – sometimes personally I think it's easier if you have fewer data points in it; then you're not scrolling around so much inside a software system that you might find clunky or not – depends on your feel for the software.

Andrew Schulte: Yeah. I don't think I have much to add to that. I think I was pretty comprehensive and I think I think it is an important distinction.

So if you are aggregating data your cell rather than for example getting whole building aggregated data from your utility – which at this point is limited to a certain number of utilities across the country – you still will need to maintain some sort of record for for doing that aggregation yourself on your end. And Julie, as you said, some people may prefer to simply use Excel offline to do that aggregation so that what goes into Portfolio Manager is a more streamlined record

Aggregation, if you're doing it yourself, doesn't take away all of the effort required to collect and streamline the data. But if it's something that you're doing in an offline spreadsheet you can set that up and you can set the formulas up to pretty quickly take new new information on a monthly basis and crunch together that new month's consumption value for entering into Portfolio Manager.

Scott Ledford: And this is Scott. Just the one other thing I'd add to that. There's an important nuance in here, which is if you can automatically get the data from a utility provider. And in some cases, utility providers may not be willing to provide individual meter data; they may only be willing to provide aggregated meter data. So definitely check in with utility providers before you go in and set up hundreds of meters hoping to get individual data from them.

Let's see. Andrew, I think this question might be a good one for you here. So Sean asks, "Is there a way to bulk select data points and mark them as estimated or set them as estimated when uploading a spreadsheet?"

Andrew Schulte: That's a great question and I figured somebody would probably ask that. When I was demonstrating in the Portfolio Manager user interface.

So unfortunately there is not currently a "select all" box within the Portfolio Manager interface for marking all data points as estimated. You saw when I was going through my demo I did need to click each of those boxes individually. I would need to check. It's very possible if that's something that is on a upgrade or update list for Portfolio Manager.

However if you are using the the bulk spreadsheet upload functionality that Scott discussed earlier there is a cell there where you can set all the records to estimated and indicate them as estimates all in one place, in one spreadsheet, and then you can upload that spreadsheet and the appropriate boxes will be checked. So yes, you can do it in spreadsheet; no at this point in time you can't do it through the user interface itself.

Scott Ledford: Thanks, Andrew. So we have another question from Michael. Michael says, "We are a new housing trust whose current portfolio is made up of single-family properties – three houses and two condo townhouses in different areas of our region. Do these have to be loaded individually or can we aggregate similar properties?"

Julia Hustwit: So this is a great question and it speaks to something that that every every one of HUD's partner housing providers is going to have to face right away when they start to utility benchmark.

So the way – if you go if you were here for our earlier webinars we talked about the difference between property level and building level benchmarking and the trade-offs between them. What it seems like you're asking is, can you benchmark at a higher level than the property; can you, in fact, aggregate multiple properties into a larger grouping and benchmark at that level? And the answer is no.

Portfolio Manager was not designed to handle benchmarking different properties that are scattered across a region, that are not in the same location, that don't function as a unit. It was designed so that it could handle multiple buildings that function as a single property however. So that's why it's possible and easiest to benchmark at the property level. And as we've mentioned in earlier webinars, if you prefer to benchmark it an even lower level, which is at the building level, you can use the campus feature in Portfolio Manager and that way you'll be able to get the most granular information which is the building level as well as the property level information at the same time. That's up to you. It does provide greater insight.

But going higher than the property level to do your whole portfolio at once would not be proper in Portfolio Manager.

Scott Ledford: Makes sense to me. Andrew, any more thoughts on that.

Andrew Schulte: Nope. Julia, I think you got it

Scott Ledford: All right. So we have a question from Karen. Karen says, "This sounds like a lot of work to gather all the information needed to enter. Do you have recommendations for the best way to gather the information, such as SF meters, property information, etc.?" SF meaning square footage, I'm assuming.

Julia Hustwit: Yes. You're right. It can be a bit of work depending especially on the size of your portfolio and how well you already keep records about your portfolio in-house.

So of course, we hope that everyone has a good handle on how many buildings, properties they own, where they're located, how big they are; has a general sense ideally of what you're spending on utilities every year and every month. That would be best practice; and in fact, that's why we consider utility benchmarking itself to be a basic asset management practice.

So if you already have your records in order, this is and should not be a large list. If you are starting from a situation where you've got information all over the place, all over your

organization, you've never sat down and kind of catalogued your portfolio before and made sure that you have all of the properties listed in one place and all the addresses listed in one place, and you've not had any good sense of how much you're spending on utility cost then it is more work to get started. But that's exactly why this is so important, because you can't manage what you can't measure and you can't manage what you don't have organized, frankly.

So what we did is we created that utility benchmarking plan template to really help you get everything centralized. There are tips on how to gather information; in particular, I want to give one right now related to square footage because it's something we didn't actually address in the toolkit but I think maybe at some point in the future we'll add.

The place to get square footage information for your properties is – there's a couple options. One, you can go – and if you don't have that listed anywhere already you can go find the blueprints for your buildings, which ideally again, you have one on file. If you don't, though, what you can do is you can look up your property record in the local property tax database online. Every jurisdiction in the country has its own website where you can type in the address for your property and it will return you to property tax records.

Usually – but not every single time – but usually it will list your square footage. That information is used for appraising buildings; it's used for setting taxes and things like that. So it is freely available; just requires you to look it up on there. So that's a tip that that you can use for finding your square footage.

Meters. You can actually just walk straight to or have your facilities managers walk straight to your meter bank in the building and write down the meter numbers. That's if you don't already have your your meter numbers listed on your utility bill, so you haven't been keeping track of that in the past. Then, simply walking downstairs in the building to the meter bank and writing down the meter numbers is probably the most efficient way to do it.

And then utility data itself, the actual consumption and cost information, obviously we've been talking about throughout this webinar series about the different ways of getting it. Generally speaking you're going to get it from the utility provider. Any owner-paid utility costs and consumption you ought to already receive that on a bill. So it's really just a matter of taking that information off to the bill and putting it into database.

You can also – for many people in the country, and if you think back to last webinar where we talked about EPA's maps and lists as well as HUD's utility data collection database – you can look up whether your utility provider will even transfer that information directly into your Portfolio Manager account for you. That's the ideal easiest-easiest way to do it. If you have to go about doing tenant data, that's why we allow sampling and then that process that we've been covering as well.

That's kind of a general overview of the different types of data collection that are part of this. Remember that it's really – primarily the biggest lift is the first time, because the first time you do it you're writing down all of your properties, you're writing down all your meter numbers; you're getting everything established in Portfolio Manager. Every time you do utility

benchmarking thereafter it's just utility data. You don't have to set up new properties. You don't have to say this is a government-subsidized building. You don't have to say this is my square footage. It's all in there forever after after you do it the first time.

Scott Ledford: Okay. Andrew, anything to add to that?

Andrew Schulte: I think that was perfect.

Scott Ledford: All right. Well, good. Then I have another question for you.

This one comes from the initials, DS. "Isn't a single data point identified as an estimate enough? It precludes receiving an Energy Star certification, right?"

Andrew Schulte: So I'm going to need to read into a little bit of this. I think this questioner is asking whether it's okay just to indicate – just to check a single box as an estimate rather than going through and checking every every box next to every monthly entry.

Yes, it is true that if even one box is checked for one meter entry, then that is going to be flagged. And so if you were to later on go about trying to apply for the Energy Star certification you would not be able to proceed because the tool would see that you had at least one estimated value as a general rule; though it's important to check the box for each monthly entry. There are conceivably situations in which for one month you weren't able to get you know an appropriate amount of data so you needed to estimate, but all the other data points are based on actual data. So the use of that estimation checkbox is not just to tell the tool whether you're using actual data or not. It's also meant as a reminder for you so that if you go in and check that estimated data flag for one or more meter entries, it may serve as a reminder of, "Hey, I know I can get this data somewhere but I don't have it in front of me from for the moment, so I'm going to put in the value I think is right I'm going to check this estimated data flag and then I'm going to come back to this later."

So yes, technically speaking even checking one of those boxes will be enough to tell the tool that you're using estimated data. But we do ask that if you're using estimated data you check that box next to each meter record that is in fact based on sampled or estimated data rather than actual data.

Scott Ledford: Okay. Thanks, Andrew. We have just a couple minutes left so I'm just going to grab one last question here. This one is from Ashley, and Ashley asked, "If residents pay the utilities and we are tracking their utilities for this Portfolio Manager, how will the data be used?"

Julia Hustwit: Okay. I can answer that question. I was actually just looking at Ashley's other question about the four properties in the time estimate, so let me go back.

Ashley's asking, if residents pay the utilities when we're tracking their utilities, how will the data be used? Well, so again, the reason for getting tenant-paid data in the first place is so that we can get an estimate or the actual 100 percent reflection of the building's energy and water consumption as well as its cost. So the intent is not to really dive into what the tenants are doing

as individual tenants. It's not to invade anyone's privacy. It is to understand how the building is performing.

And without the information about how much energy and water is being consumed in each apartment level, there's no way to understand how the building is consuming as a whole. So that's the intent there. The tenant data gets rolled up into an aggregate. It either gets extrapolated to a whole building consumption number if you're using sampling; or, if you're collecting 100 percent of tenant-paid bills, it just gets added all up as a sum, which then reflects the whole building usage. And then that number gets used the same way as if it was a completely master metered owner-paid building.

The number is divided – so for instance, your total BTU, which is your energy consumption, is divided by square footage and that's how you get your energy use intensity metric. Your water usage, which comes out in total gallons for the building, gets divided by square footage and that's how you get the total water use intensity metric.

EUI, which is the energy use intensity metric, gets compared through a linear regression model. It gets compared to buildings of a similar type and that's how the Energy Star 1-100 Score is created and it will rank the performance of your building compared to buildings similar to it.

So as you can see, the outputs of utility benchmarking don't really have anything to do with the tenants themselves or their behavior. Obviously their behavior does affect the performance and consumption of the building, but it's not about developing any metrics related to tenants. It's just a matter of getting all the information rolled up to the building level. I hope that answers that question.

And then since I was looking at your other question, Ashley, at the exact same time, I'll quickly address your question about time estimates for a four-property portfolio.

The answer to this – so you're wondering how long is it going to take to get your account set up for your property. Well, a four-property portfolio is very, very small; and with such a small portfolio I would probably myself – totally up to you – I would probably manually enter it because it's so small.

So you would go into Portfolio Manager; you would say "add a property," give the property a name; you'd enter its square footage. Now, if you have a database and you've been keeping track of your information, you know how many square feet that property is, you just type the number. It doesn't take any longer. If you have to go fishing around for that information obviously that does add some time but it's a one-time task and it's a really important piece of information that'll be useful for you for utility benchmarking as well as other things that come up with your buildings and your properties and your finances; for instance, appraisals, if you ever sell the building, things like that; if you are going to do a retrofit on the building, knowing square footage is really important. So that's something that's worthwhile to get anyway.

There's only a few use characteristics – just like Andrew was showing us today – to fill out about each property. Is it government subsidized; is it a multifamily building? Of course it is because

that's why you're here doing benchmarking. Is it that – I'm actually forgetting how many units are in – the height of the building; how many units are in a 1-4-story setting; how many units are in a 5-8-story setting? That kind of stuff you should know pretty quickly and it's just a matter of typing in this and those information.

So again, if you know the answers to these questions, it really ought not to take more than you know five minutes per property to get that basic information into the system. It's when you go to do – you also in your question asked about 50 units per property. If you are fully master metered, and it's just a matter of taking your utility bill for that property and typing in the consumption from that utility bill and the class from that utility bill then you're done. That's it. If you are having tenant-level data in that property, then you either are going to have to get from your utility provider aggregated whole building data, which is very quick once they – the request might have a delay involved in it; might take a few weeks before they send you it, but once they send it to you, it's right there, you just type it in.

If you have to do sampling of your tenant-paid accounts that can take longer because then you need to go and get at least a minimum number of tenant release forms and then send them to the utility provider. But then once you've done that, utility provider gives you the information and you just type it in.

So for a four-property portfolio it really is a very tiny amount of data entry; less data entry, frankly, than it takes for me to do my personal income taxes. But it has to do really – I keep emphasizing this – with whether you have your records in order ahead of time or not. So I hope that answered the question and I realize we have run right over the 3:00 mark so I'm going to I'm going to call it, hand the mic back over to Scott, and we'll be back again next week and can take more questions then.

Scott Ledford: All right. Thanks, Julia. And I'll just throw in there, Julia gave a great little preview of the webinar next week, which will be about reports and things like that, when she was answering the question about how does the individual tenant data get used. You'll see some reports and the roll-ups and things like that.

So just to highlight real quickly, here's a summary of the resources related to the material that we've covered today. All of these are links to from within the new toolkit. Here's the contact information for each of us. And we thank you once again for joining these webinars and look forward to sharing more with you again next week. Goodbye for now.

(END)