

*Joel:*

Hi everyone. Thanks for joining us. We are here for the U.S. DOE TAP Webcast Benchmarking and Outreach Data Collection Techniques for External Portfolios. Hopefully you're in the right place. We'll begin shortly. Just a few sort of housekeeping – if you want to use the telephone, that's sort of the best audio quality and you can find the dial-in number on your control panel, to the right, with the access code.

We'll have a Q and A session at the end. If you do have questions during the presentation you can type them into the question box in your control panel to the right and we will try to answer those as we go. And we'll just give a couple of minutes for people to log in and sign in.

All right well let's go ahead and get started here. Thanks everyone for joining in. This is the U.S. DOE TAP webcast on external – sorry, benchmarking and outreach data collection techniques for external portfolios. Once again just some quick housekeeping, for best audio quality we recommend dialing in using your telephone. You can find the number there at the bottom of the screen or in the control panel, and the access code.

We'll have a Q and A session at the end. If you do have questions during the presentation you can type them into the question box in your control panel to the right and we will try to answer those as soon as we can. Okay, next slide.

Great. So thanks again for joining in today. This is Joel Blaine, with the Department of Energy. I work in the Weatherization and Intergovernmental Programs office, or affectionately known as WIP. Today we're going to cover some tips for benchmarking outreach and data collection techniques for external portfolios. And I'll describe a bit more what I mean by that in a second.

We've got a great line up and we're happy that Caroline Keicher from the Institute for Market Transformation, or IMC, Leslie Cook from EPA, John Bracey and Maria Quinones, who support the Atlanta Better Building Challenge, and then Donna Albert from the State of Washington are all able to join us today. We've got a really awesome line up. Next slide.

Great. So here's just a quick overview of our agenda. We've got a welcome and overview of the TAP system, then we'll do a quick introduction to what we mean by external benchmarking, we'll move into some promising practices from the Institute for Market Transformation, and then we'll hear from EPA on resources for

external benchmarking. Atlanta is going to share a little bit about their approach for the Better Building Challenge, and then we'll get to the State of Washington on engaging Washington's external agencies. Next slide.

Great. So this webcast is brought to you by the technical assistance program, in support of EERE's mission of taking clean energy to scale through high impact efforts. TAP's been around for about a decade and has handled thousands of inquiries. Under the Recovery Act, TAP expanded to – expanded their range of resources to include one-on-one assistance, an extensive online resource library with webinars and a blog. And also added peer exchange facilitation. Next slide.

Great. Okay. So just like state and local governments, TAP has a post-ARRA transition to contend with. But rather than reverting to our pre-RF framework, TAP is evolving to get the biggest bang for our new, more limited buck and to help you do the same as well. So moving forward we're going to focus on key priority areas that – to address specific market barriers. We're going to include resources to disseminate standardized approaches, the best practices. Plan on continuing to facilitate communication and learning among peers, and that includes some additional targeted one-on-one assistance.

And I know one-on-one assistance might perk a few ears so I'll just give some additional clarification there. Applicants that submit applications through the solutions center to be considered for one-on-one assistance. In depth requests will be evaluated based on a set of criteria including the broader impact of the effort, the associated time or the cost of the request, and how it addresses existing gaps in the TA. Generally speaking there is a shift towards program and policy based assistance as opposed to run-off project consulting. Next slide.

Okay so here are a few ways to get connected with TAP. Again, we'll send a copy of the slides around after the presentation so you don't have to scramble to write down these links now. Next slide.

Oh, I skipped one. Yeah, sorry about that. So just real quick, highlight data management as a – and EM&V as a priority area, if we could go back to that slide, Jennifer. Thanks. So as I mentioned before, data management and evaluation is one of those priority areas. And this webinar is part of that focus. This slide references a handful of resources related to data and EMV, and I'll just real quickly highlight a few.

So be sure to check out the solutions center for some of the past webinars around benchmarking. Also check out the Better Building Alliance if you're interested in some additional peer exchange. And then register for the Better Buildings summit in D.C. if you're interested in interacting face-to-face with peers and industry experts. We'll send out these slides so you can get that registration link after the presentation.

Okay let's skip ahead two, Jennifer. There we go, great. Thanks. So we've talked about in the past webcasts of the process of setting up a benchmarking plan and data collection techniques for internal portfolios. This week I'd like to turn our attention to benchmarking buildings that are outside of our own management or our own prevue. Many organizations are moving beyond benchmarking the buildings they manage and reaching out to external portfolios. And they're doing this in order to create awareness around energy use as a means for promoting energy efficiency. And they're doing this as a way to foster energy management practices in the community and to promote market change through greater transparency in building energy information.

There is a value in helping others benchmark their buildings and incorporate the data in to their energy management practices. And in many cases just to get others started thinking about energy management. Having others disclose energy use can also drive market change so that there's value attached to a building's performance. It's sort of like the concept of the MPG or fuel efficiency ratings with cars. And hopefully that's something we consider when we're buying cars.

But it's hard to get that same sort of equivalent or rating associated with buildings. And so disclosing the energy performance of buildings can help others sort of consider the building performance as they're purchasing, leasing, or developing buildings. And ideally impart a greater evaluation with energy efficiency in buildings. Next slide.

All right. So a lot of organizations have really latched onto this idea that measuring energy used in the community can drive change in the energy use. And they've made a commitment to external benchmarking programs through both benchmarking and disclosure policies or energy efficiency challenges. IMT, who we'll hear from in a minute, has this great interactive map that highlights organizations around the globe that have implemented

benchmarking and disclosure policies. And EPA also tracks programs that have adopted benchmarking programs that incorporate a portfolio manager. And we'll hear more on that in a minute as well.

And then also on this slide we've attached an image of the Better Buildings challenge map, which is a DOE program challenging public sector organizations to commit to a 20 percent energy use intensity reduction and to engage the community in benchmarking and sharing energy use as a part of reaching that 20 percent goal. So there's definitely a lot of other examples out there about external programs and benchmarking and disclosure programs. So if you're looking to find out about a few of those definitely check out IMC's map, or EPA, or the Better Buildings Challenge. Okay, next slide.

Okay, so as a growing trend, DOE, EPA, IMT, and a handful of others have developed a lot of resources around setting up a benchmarking and disclosure policy, or participating in an energy efficiency challenge that includes some sort of external benchmarking component. So if you're interested in learning more about getting started we've brought in a handful of resources that can help you. So again, when we send out the slides you can have access to those. Next slide.

What today's focus is is to highlight resources and information about implementing an external benchmarking program. And specifically sources on outreach and data collection as a way of improving participation and the data collection process. So for this webinar we're assuming, or maybe pretending, that you already have an external benchmarking program and you're working to increase participation and compliance with those benchmarking requirements.

If you're just getting started with an external program and maybe asking yourself, "What did I get myself into?" We're hoping to answer the questions of how to improve compliance and participation, how to get participants to incorporate benchmarking as a part of their energy management practice, beyond just sharing their data how do they actually sort of bring that benchmarking process internal? And then how do you set up the data collection so that it's manageable and consistent? So I've asked my friends from Institute for Market Transformation, EPA, City of Atlanta, and the State of Washington to provide some more information and a greater perspective on what it looks like to implement one of

these external programs. And so I'll start first by turning it over to Caroline with IMT. And I'll pass the baton to her.

*Caroline:* Great, Joel, thank you so much. Can you guys hear me all right?

*Joel:* Yes. Great.

*Caroline:* Okay. Great. So thanks again for the opportunity to chat with all of you today. As Joel said, I'm with the Institute for Market Transformation. Next slide.

So Institute for Market Transformation is a D.C. based nonprofit that works around the country, basically trying – with a focus on energy efficiency and green building policy. And our main focus is trying to remove barriers from the marketplace that keep the market from fully valuing energy efficiency. And also helping to create new indicators in the market that help the market better value energy efficiency in a systematic way. We are a national best practices center.

We advise state and local governments, federal agencies, and industry groups on green building policies. We service the U.S. Global Building's Performance Network, and the Data Alliance and a bunch of other complimentary programs. So our work is definitely nationwide but with a focus on local and state governments who are taking big strides in this area. Next slide.

So just to give you an idea of both where we work and also where we're seeing these programs pop up – Leslie informs me that my map is a little bit out of date, especially in terms of the public building benchmarking program. So I apologize if you know of someone or you are someone who should be up here and you aren't. We'll work on getting this updated very soon. But our main focus – you can see there's a wide variety from policy interest to public building policies, to residential disclosure policies.

And those include everything from utility bill disclosures to time-of-sale home audits. But the area that we put most of our focus on are these sort of red cities and states where there are commercial, mandatory benchmarking and disclosure policies in place; either a public disclosure like in New York City or a time-of-sale disclosure like we have in Seattle.

So that's sort of the – that's sort of the perspective that I'm coming at this today from. Our work in the past – working with these cities and states as they've tried to increase compliance with their

mandatory programs, that's really my lens. But I think that a lot of the lessons that's we've learned in increasing compliance in participation with mandatory programs could translate over to work with volunteering programs as well, just in terms of getting more participants, getting the word out, doing education, and getting people involved. So I hope that it will be helpful for both audiences. Next slide.

So just to start off, I'm going to go through a couple of sort of case studies of cities that have done, again, the mandatory benchmarking and disclosure and kind of what they've done in terms of concentrated and focused outreach and education efforts to try to increase compliance. New York City passed the Greener, Greater Buildings plan after they set a reduction target of 30 percent – a greenhouse gas reduction target of 30 percent by 2030. They're package is one of the most forward-looking in the country. It included mandatory energy benchmarking and disclosure, mandatory audits on a periodic basis, retro commissioning, lighting upgrades and tenants of metering.

In New York City they basically saw that they needed to go after their buildings, that they counted for \$15 billion annually in energy costs and had about over 90 percent – 90 percent of their electricity – so their law applies to all buildings over 50,000 square feet. And at this point – they actually had an enormously successful compliance rate at the time of their very first compliance deadline. So you know, first shot out of the gate they were already at 64 percent compliance.

And we've been told that with any brand new law on the books if you achieve over 40 percent in your first year you are doing really well. And New York City was really quite stunning in this. And then six months later they were at a 75 percent compliance rate. And then the next deadline, again, were over 75 percent compliance rate. So they've had a very successful go at this. Next slide.

So I wanted to break down a little bit what exactly were they doing to increase compliance. What was their outreach strategy? And it's clearly multifaceted. There's a lot going on here and a lot of places they went and how did they get in front of the right audiences, how did they get the information to the right people, how did they make sure people know about the law and the rules to comply? And just how do they do that on a wide enough scale that folks are participating and complying? New York City is a – well not rare case – but certainly a large case in which they are

looking to reach owners, and managers, and lawyers of over 16,000 properties.

So for a lot of other cities this is a much more manageable number. In New York City it was quite large. So I think in that case it's pretty impressive. But they had – so just to go through this very quickly, notifications letters, warning letters, and messaging and quarterly statement of accounts; which they worked with other departments to help send those out. They had email blasts to large building organizations and trade organizations. They did live, weekly, three-hour portfolio manager training specific to the law, which they worked on developing with partner organizations in the EPA.

They did online trainings through the EPA, again. One of the big things that we saw really helpful in New York City was a benchmarking help center. They got graduate students from CUNY, and with funding they basically put together a call and help center which allowed building owners who were benchmarking to – or managers, or whoever was doing the benchmarking to call in, get assistance with anything from how to comply with the law to using portfolio manager, to accessing their energy consumption data.

So that was a huge help and really helped building owners feel very supported in the law, that they weren't just being thrown to the sharks, that they had someone to help them through this. There were step by step instructions for compliance that were put together through the Urban Green Council and related companies. Con Edison, the utility serving New York City, created a step by step guide and FAQ on how to access building energy consumption data. There was information put together on the website so that people come to the mayor's office website and get all the information you needed about the law and how to comply and then there were also monthly outreach events to the general public. So this was clearly a very sophisticated and multi-tiered outreach strategy.

But I also want to point out that New York's success – at least what they account for their success comes from many different factors. So not only was there this fantastic outreach and education and training plan, but they clearly used a lot of partners in doing this. They weren't just trying to do it all out of the mayor's office; they used non-profits, and other companies, and other departments to really help leverage the impact that they could have. They also had a fair amount of public exposure and media attention because

these – because these laws were part of a larger, Greater, Greener Building Plan and Plan NYC. So they had that going for them as well. They have strong enforcement.

There was utility support – and I have clearly spelled utility wrong, I apologize for that. This is something that we see – and I’ll talk about it more in a few minutes – but to have utility support, to have a way for building owners to get whole-building energy consumption data to benchmark without having to go door to door, office to office asking for this data from all of tenants in hugely, hugely, just a huge barrier removal for conducting benchmarking.

Also, New York City focused on just the large buildings, everything over 50,000 square feet. So that meant that even though they were capturing 50 percent of the square footage in the city, they were only impacting 2 percent of the buildings. They were really able to focus in on just those large buildings and not going down into the smaller, where it gets to be more onerous for the city. Again, they were looking at 16,000 properties. And for every city that threshold is going to be different, but that was New York’s.

And then they had a lot of participation with energy efficiency consultants and vendors. So the energy services companies were going door to door talking to building owners, telling them about the law, offering their services in terms of benchmarking and down-the-road audits commissioning upgrades and really were the boots on the ground spreading awareness on sort of a grass roots level. So they were very instrumental as well. And actually, I believed it’s about half of the buildings in New York City, under the law, were benchmarked by third party energy services providers. So that worked well for the building owners and the consultants. Next slide.

So San Francisco – I’m not going to go through these in detail. I have a slide for San Francisco and one for Seattle as well. But you can see a very similar pattern; notification letters, working through local trade organizations, media outreach, lots of training; both sort of online webinars and more in-depth, often live, workshops where people could come in person and learn. Sometimes, in the case of San Francisco and Seattle they actually had in person workshops where people could come to a computer lab and get help with portfolio management if they needed it. Again, the benchmarking help center.

And then if you go to the next slide, San Francisco used a really



innovative compliance tracking method. They partnered with Honest Buildings to put up a map -- and you can kind of see the map behind my text -- a map of San Francisco showing all the buildings that were in compliance and all the buildings that were out of compliance. So it didn't actually release -- they will be, down the road, releasing the energy consumption data because of the public disclosure law. But for the first year where it was just -- there was a grace period and they were only releasing compliance data this was a very effective tool because people could look and see which of their neighbors were in compliance or not in compliance and it really created some positive peer pressure to comply with the law so that your building showed up as a little green dot instead of a little red dot.

San Francisco has had very good compliance rates as well. They are 65 percent compliant with their buildings over 50,000 square feet and 59 percent compliant with buildings over 25,000 square feet. And then for the smaller subset of buildings, they are actually the city that's going the deepest in terms of threshold.

They're going all the way down to 10,000 square feet which asks -- whereas the first two numbers are several hundred buildings, when you get down to 10,000 square feet you're talking about a thousand or more, maybe two thousand -- I'd have to look up the numbers -- buildings. So it's a much larger base and it's much less often part of trade group organizations or a little bit harder to reach. So they've just had that deadline and they're at a low compliance rate but they're doing active outreach to try to get to more of those small buildings. So next slide.

So Seattle, again, a very similar breakdown. I won't go into this in too much detail. Just again I want to focus on not only were they doing trainings and education and outreach to stakeholders, but a lot of partnerships with city -- with local organizations, with NEEC, with NEEA, with the community college. So there was a lot of good partnership and a lot of different avenues that they were taking to do this outreach education. Next slide.

And this is just an example of one of their overdue warning notices that went out to building owners to let them know that they were out of compliance with the law. Seattle also had a grace period for their law so they were just giving people a heads' up that they needed to come -- they needed to get into compliance. Seattle has been doing very proactive outreach since their first deadline.

Their help center has actually worked as a -- they hired a full time

person to oversee the interns that were running the help center and had that person be a fully dedicated staff member that actually did proactive outreach to noncompliant building owners in the times that they weren't getting help center calls. And so they've done this very targeted – calling specific building owners and really trying to do one on one communication to get people up to speed on the law.

And it's had a huge impact. They're at very high compliance levels for their buildings over 50,000 square feet; 89.9 percent, 92.3 percent. And then their most recent deadline, which included the buildings between 20,000 and 50,000 square feet, they're a lower compliance rate, but that's to be expected. Again, it's a lot more buildings. I think it's like 2,000 that are in that category. So they're doing a lot of proactive outreach. And I think it will take more time to reach all those folks. But again, we are very much focused on that outreach and education portion of this. Next slide.

*Joel:* Caroline, I'm sorry to interrupt here.

*Caroline:* Sure.

*Joel:* My screen is sort of flat and locked in New York City. I wasn't sure if that was the case for everyone else. Are you seeing the current slide presented?

*Caroline:* I am.

*Joel:* Okay. Great. Maybe it's just my screen. Thanks.

*Caroline:* Sure. So I also wanted to put up this slide about data access in Seattle. Seattle basically set sort of the golden standard for data access. There are three utilities, Seattle City Lights, Puget Sound Energy, and Seattle Steam that all serve the Seattle area. And all of them were set up to offer automated benchmarking. So the building owners could call and set up an account and have their energy data transferred directly to their portfolio manager account. So in New York City building owners could get whole-building energy data but they had to go to the utility and ask for it. And I think they got it in a spreadsheet. So still a great solution, but not quite as awesome as this automatic benchmarking that was set up in Seattle.

This didn't mean that there weren't problems. Users were irritated that they had to go through each of the three utility processes to get the data. There wasn't one streamlined process. So we're learning as we go – cities are learning as they go and utilities are learning.

This is all very new. But it still was incredibly helpful in Seattle to have this system. A lot of the initial handholding in outreach was around getting the system set up so that building owners could get the automatic data upload. But once that was set up that sort of set up the heavy front end and now it's set up. So moving forward it should be much, much easier for everyone to continue to be in compliance every year. And so heavy upfront investment but a big payoff for the city in terms of compliance and getting this information. Next slide.

So we also work on this issue of data access. And again, improving access to data helps remove a very significant barrier to compliance targeting whether you're talking about a voluntary program or a mandatory program. The easier you make it to get the data the easier it is for people to benchmark and the more likely they are going to do just that.

And so we've created the data access and transparency alliance which is basically working in parallel to help increase best practices for access to energy data through utilities – bringing utilities together, creating new policies, creating – or instilling best practices. And getting utilities talking to each other and the ones that are leading the way sharing benefits and reasons for providing a service, as well as challenges and things that they wish they had known when they started out on it. So it's been a really valuable process. Next slide.

Another thing to think about, I'd just like to throw it in there. There are other policies that can really help improve and enable benchmarking. So if there are Green Leasing policies, lead by example in terms of getting people to think about overcoming the split incentive between tenants and landlords and incorporating benchmarking in doing that tracking. Tenant sub-metering, again, to get over this barrier of a split incentive, and then if financing mechanisms are available but dependent on showing before and after benchmark work. These can all tie in and improve and encourage people to not only benchmark but to act on those – that benchmarking information. Next slide.

So I wanted to point to a couple of resources that I think could be helpful to folks. We have a help center guide that actually looked at the help centers that were created in New York City, Seattle, and San Francisco in very great detail; how much they cost, what the structure was, how the partner ships were developed, kind of a guide to if you wanted to set up your own help center what would you need to know. So that's a great resource.

We have a utility guide to data access which goes into a lot more detail on the data access issue, what different utilities are doing, why and who's leading the way and the benefits involved in that. It's a really fantastic paper that my colleague, Andrea, put together. We have a white paper, The [\\_\\_\\_\\_\\_](#), Lessons for Implementation in New York City, Seattle and San Francisco, that actually goes through a lot of what I talked about today in terms of the outreach and partnerships but goes in to more details on how they structured their policies and why, thresholds, whether or not to include multi-family data access.

There's just a whole lot more detail and what they learned in the early months to first kind of year of their policies being implemented. And then our website, [buildingrating.org](http://buildingrating.org), which has a lot of good resources and graphics. And I'm at [IMT.org](http://IMT.org) resources is where most of these are available. So I hope some of those will be helpful. Please let me know if you have any questions or if there's a particular resource that you need or are looking for. We may have or we may be working on one, and we always enjoy feedback on what folks need in terms of our next internal assignments for resource creation. I have one more slide with my contact information on it. But thank you all and yeah, look forward to talking to any and all of you at some point.

*Joel:* Great. Thanks so much Caroline. And from that I'll hand it over to Leslie Cook with EPA.

*Leslie:* Great. Thanks Joel.

*Joel:* And Leslie, can you see your slides? Mine are still frozen.

*Leslie:* I can see them advance. There seems to be a bit of a delay but I seem my slide now so I think we're okay.

*Joel:* Great. As long as you can work. Thanks.

*Leslie:* Great. Thanks. And thanks everyone for joining today. I'm happy to have this opportunity to talk with you. And following a fantastic presentation by Caroline. I wanted to focus on the EPA Energy Star perspective on what we're seeing across the country in various programs that are either established or budding or planned, that incorporate portfolio manager benchmarking in various contexts, including a voluntary approach, which would include an energy efficiency or sustainability sort of campaign or contest, or perhaps a grant or incentive program that incorporates Energy Star portfolio manager benchmarking to track results.

Or like Caroline really focused on, benchmarking and public disclosure, mandatory policies. All of these types of programs across the country are expanding and they're including Energy Star portfolio manager benchmarking.

So I'd like to go through and talk about EPA's best practices that we've seen coming out of these efforts to do community-wide stakeholder outreach and then focus in on some key resources related to portfolio manager benchmarking and your data collection efforts, as you're in the seat of the program manager. And using the tool really as a powerful platform to get the information you need to evaluate your program, to increase transparency of energy efficiency information, and also communicate all the great results that you're seeing locally, or regionally, or at your state level.

And I do want to say that EPA is here, and thrilled, and very happy to work with any and all program managers that are looking to incorporate Portfolio Manager and other energy star resources into their programs. We're focusing on a lot on Portfolio Manager today which is great. It's really a keystone resource of Energy Star. But we – Energy Star through EPA does offer a lot of resources on improving your buildings too. So while we're focusing on Portfolio Manager, I did want to just preface the talk with that reminder.

For those of you – I don't want to spend too much time on the current slide. I think we have, Joel had – through the previous sessions in this series, gone through a lot of details. And the Portfolio Manager benchmarking tool that EPA offers. Quick overview; this really is a management tool. EPA has offered Portfolio Manager for over 10 years now to private sector and public sector organizations across the country looking to manage their business practices, their energy use, their weather use, their energy costs, greenhouse gas emissions in one centralized platform.

And we have seen tremendous growth in using the tool as a management – as a management practice. You can think of the tool as a metrics calculator that for you in your own buildings. Hopefully you have experience with it. But it's – in the context of an external program, this is a calculator that you can ask your program participants or policy participants to use Portfolio Manager and translate their utility, energy, and water consumption bills into really easy to understand performance metrics.

And you can use the tool as a platform to collect these key metrics like energy consumption. Metrics including; source energy, site energy, weather-normalized metrics to help eliminate the confusion that comes around trying to establish what your performance is and all of these kind of inconsistent weather patterns we've been having. So the tool helps with that. Of course the Energy Star 1 through 100 score is available for a lot of building types. And that would indicate your performance and energy as compared to peer buildings nationwide. Like I said, Key greenhouse gas emissions metrics are available, as well as water consumption.

So that's sometimes an unknown function of the tool. But you can track water alongside energy consumption. So when you're thinking about what your program goals are and those key pieces of data that you need to collect to, again, communicate your successes, evaluate your program, help your program stakeholders and participants understand their own opportunities. This is a tool that you can use to gather all of that. It's available at the website that you see at the bottom of your screen. Next slide please.

So just a few quick notes on why state and local governments are choosing Portfolio Manager. And of course there are a lot of private sector companies that are using portfolio managers as well focusing on the benefits of using this as a platform for your government programs. This is a tool that will provide you consistent measurement data and collection methods that allow you to have the ability to compare all of your program participants on an even playing field. Everyone's using the same reporting tool, everyone is getting the same metrics on their own – in their own Portfolio Manager account.

So that consistency is really important when you're trying to implement a broad program. It does deliver those key whole building energy performance information based on actual utility data. And again, important for program managers like you, there are lots of different data sharing options available. I'm going to talk in detail about our custom reporting feature, which I think has been instrumental in allowing state and local governments to really leverage Portfolio Manager in a streamlined way to request and collect the data you need to deliver a program like this.

And also it helps to know that this is the industry standard, really nationally, locally, and in your own markets, likely as over 300,000 buildings across the country are using Portfolio Manager

currently. This is a number that's growing over time. And I have to say thank you for all of you on the phone. A lot of this growth has to do with state and local governments incorporating Portfolio Manager into their outreach and other policies.

So you can rest assured that as you adopt Portfolio Manager as the benchmarking tool within your program you shouldn't be springing something on your participants that they haven't seen before. You know, it really is adopted by leading commercial real estate, retail, K through 12, and other industry leaders as their own internal management tools of best practice. So hopefully you're just asking them to do something that if they're not already using in their own corporate structure, then they're using a tool that they have already heard of.

And again, like Caroline has highlighted, that Portfolio Manager from EPA is the – is a platform that is included in all the adopted state and local public disclosure policies in those states and cities. Okay. Next slide.

So a few slides on community outreach. I think Caroline did a fantastic job on covering this so I won't spend too much time here. But we've seen that it's really important to define your goals. Of course as your delivering these programs it's critical to define your goals early on and communicate those goals to all of the stakeholders or participants, or building owners that are going to need to comply with your mandate so that it's clear that the activities that you're asking them to partake in, be it a grant program to improve their performance through maybe and incentive, or perhaps it's an energy efficiency competition where you want to recognize local leaders and achievements, or maybe it's a mandatory benchmarking and disclosure policy.

Define your goals and connect it to your local programs that your stakeholders are familiar with. So for instance, for NYC, like Caroline highlighted, New York City put out a very public and very aggressive goal to protect the climate, to increase energy security within New York City. And it was clear that the benchmarking policy they were introducing was supporting that effort city wide. And you'll hear from Atlanta and Washington today that their efforts, also, very clearly tie to their local – their local broader sustainability or energy efficiency climate protection program. So pick your goals. And we have found that defining them and communicating them early on is critical to getting folks on board. Next slide please.

I know we talked about this a little bit already, defining who's going to be at the table to partner with you for this effort is really key to getting the most participation out of your program and really sharing – sharing the kinds of efforts that need to go into continually offering outreach and training and education beyond just your launch and into the implementation, and into the multiple years that you're going to be running these programs. It's critical to have a strong commitment from your local associations representing your key building – your building sectors.

Perhaps you're focusing on the commercial real estate, if your policy includes multi-family it's really key to get those stakeholders in the door because multi-family, we've found, is maybe a little less familiar with some of the whole-building benchmarking strategy and some other efficiency programs. Local energy efficiency and sustainability organizations like Urban Green in New York City, we've found to be really critical.

A note on energy service providers, like Caroline highlighted, we've seen in location to location that these energy service providers, consultants, vendors are really critical in helping their clients, their building owners, which is your target audience, either sign up and take part in your program or comply with your policy on time. And it's really critical to find those trade groups and get them to the table. Utility providers, I've got a quote up here from Excel Energy. We've sign time and time again that be it your approach – if it's a voluntary approach or mandatory approach, having the utilities at the table is a win for everyone.

By implementing your program you are giving the utility a channel to approach and reach out to engage building owners that may be motivated to participate in their utility provided efficiency programs that they need to generate interest and increase their own participation. So they're excited to see the building owners benchmarking and understanding their performance and, again, getting more motivated to take part in those utility programs. And like was already discussed, the access to energy efficiency and for energy consumption information from utilities is a really great place for you to focus on – through your program and help building owners get over those barriers.

And utilities obviously have a great role to play in that. And we have found, like in this Excel Energy Kilowatt Crackdown, which is a voluntary program, Excel Energy found that helping those participants access their energy was beneficial to everyone involved. We've seen in multiple markets like New York City and



Washington D.C., the passage – and others like Seattle, the passage of these energy efficiency benchmarking and disclosure policies have really spurred the utility providers to offer brand new, whole building data request services that were not available before the state or local government put those programs into place. So you really do have a big role to play there. Okay, next slide.

And just real quickly here, this may be obvious but these programs – we know you’re not putting them into place just so folks can access portfolio \_\_\_\_ and benchmark their building and enter their data into the tool and then send it back to you and check the box and move on. It’s really critical, I know that you all want them to be benchmarking and measuring and understanding their performance information so they’re taking action and actually taking part in efficiency programs.

And taking part in operational and educational no-cost, low-cost ways to improve their performance and taking part in deciding to invest in efficiency improvements and communicating that early on to say, “This is what benchmarking can get you, this is not just a data collection exercise, this is not just another regulation from the state or local government, this is a really valuable exercise for you as company, for you as a building owner, for you as a tenant.” It’s really important to get that out early on. Okay, next slide.

And of course we do have a wide variety of EPA training resources that are off the shelf and ready for you to deploy locally with your local partners that perhaps are doing some training in local markets, these webinars that we provide on a regular basis on how to use the tools are something that you should leverage to get the word out and get your local buildings participating on. So EPA’s got lots of resources on training to use the tools for Energy Star. Next slide.

And also on community outreach I wanted to highlight some really great local opportunities you have to leverage the Energy Star brand, leverage Energy Star recognition that’s available through EPA at the local level. So – and even if – and especially if you’re implementing a mandatory program it’s really important not to forget that you want to recognize the local business owners, the local companies, the local schools that are finding success through benchmarking and understanding their information and taking part to improve their performance.

And you’ve got the first picture here, there’s Arlington County Green Games is a really fantastic voluntary energy efficiency

awareness and sort of competition that has pitted Arlington businesses in an annual contest. And over a third of their office stock has participated. This is Arlington County in the D.C. area, this is a very urban county. They did a great job recognizing their participants who got a shot here from former mayor – Mayor Abramson in Louisville Kentucky, the city was recognizing all building owners that earned Energy Star certification year by year, just to give extra recognition at the local level. And that can really motivate people to understand where benchmarking can get you when you actually act on the information. So just a – just a reminder there that that’s important. Next slide please.

And a great guide that we’ve put out through Energy Star is available at this website, a competition guide. And it goes through all of the step by step best practices that we have seen in all of these local, sometimes regional, and sometimes corporate level energy campaigns. And this guide really does focus on how to incorporate Energy Star and Portfolio Manager at each step of the way. So I’d encourage you to check that out. A lot of what we have gathered throughout the years is summarized well there. Next slide.

So take the next few minutes to go through some best practices on data collection. And this really – I – for time’s sake I wanted to go through some of the guidance that we provide for Energy Star as an example of the type of assistance EPA has for you as you decide to incorporate Portfolio Manager either into your mandatory benchmarking policies or voluntary campaigns. So we’ll just go through quickly, next slide, and talk about some of these resources.

First, since we’re talking about data collection, I thought it would be nice to just clarify what information is needed to use Portfolio Manager to benchmark. And it’s pretty simple. It’s building identifiers, the name, the street address, the zip code. That’s important for weather normalization. All the participants in your program or policy will then need to enter their space type information based on what building type they are benchmarking.

We use an office as an example here. And then finally the ongoing activity of benchmarking is really entering your energy use, your energy consumption at the monthly level over time that you’re getting from your utility into the tool. And I didn’t include water here, but that is similar to energy use. You track at the meter level. So this is the information that your stakeholders need to get into the tool. Okay next slide.

Next I wanted to clarify that there are multiple ways to get that information into Portfolio Manager. And this is good to keep in mind as your thinking about your outreach and helping your participants, your stakeholders, to use the tools properly. There are options available and it really depends on what level of portfolio management they're trying to do in the tool.

So first there's a very simple, single building entry and you go through the tool, you open your account, and you just type away. And you enter in that simple information and that doesn't take much time at all. However, if you are benchmarking or you've got stakeholders that are benchmarking a large number of groups, of buildings, then they want to do something that will save some time. And we've got bulk data upload options available. And that's really Excel-based templates where building owners can plug their building information plus utility consumption data into an Excel database – I'm sorry, Excel spreadsheet and upload into Portfolio Manager.

And then next is our web services, or what's been referred to as automated benchmarking. And building owners can tap into their services provided by energy consultants or utility bill handling companies that have provided web data transfer into Portfolio Manager automatically from web services for their customers or clients. And of course we've discussed already that utilities can also, upon request, transfer data for their customers into Portfolio Manager and EPA is very interested in seeing all of the web service offerings across the country from private sector consultants to utilities expanding. And we've got lots of resources for both of those audiences if you want to get that interest going. Okay, next slide.

Next, to get down into the itty bitty nitty gritty a little bit, we do have a lot of resources that Portfolio Manager is nestled in to help the users of the tool use it correctly. And one here is just a snapshot of what we call the data collection worksheet. And we've got lots of information in our Portfolio Manager help portal to help clarify what is your information needed to benchmark in the tool, and where – where can users go when they have questions. And they can go to EPA's resources in addition to, if you open up a call center, that's great but just know that EPA does have all of this available for you off the shelf. Next slide.

We've got lots of quality assurance tips for folks using the tools. These are the most frequently seen mistakes that we have helped folks get over and get their data in better shape as we've worked

with partners over the years. And so we do have some tips and tricks on helping people use the tool so that you, from the program level, know that you've got these resources to help people use the tool correctly. Next slide.

Okay the next few things I want to focus on that will really wrap up my talk here is our custom reporting feature in Portfolio Manager. And for those of you that have used the tool, this is a feature that allows you to create your custom report. And you can run this custom report for your own portfolio that you're managing in Portfolio Manager and this is also a feature that allows you to request and collect electronically data from other Portfolio Manager users, which is really key as you're using the tool to implement state or local wide programs. Again, all of the benchmarking, all of the key performance metrics that are available in tool are available through this reporting interface. So you can choose what you need specific to your program. Next slide.

So you access it – just so you know I'm not talking about a separate tool – you can access the custom reports right within your Portfolio Manager account. And that is the current Program Manager interface. And there's the little button you click and you get right into the reporting feature. Next slide please.

So some best practices; and again, this is the type of information that we try to help partners with as you're setting up your program in your state or local government. First you want to select the data that's specific to your data. Again, you define your goals, what type of information do you need to collect. And you can build your custom report template right in Portfolio Manager to include that information. And that can be a small report, if you only have a group of, let's say, five key performance centers that you want to collect. Or you can have over 100 pieces of information in the template if you really are using Portfolio Manager to really build a broad database.

Again, all the information that are – your participants are collecting and managing in Portfolio Manager are available to you at the program level. What you can do also is utilize the filters in the reporting feature to further customize and really get what you need. First you can filter it by location, and this is something that benchmarking and disclosure cities have found really useful to lock their reporting template right to New York State, or to the state of Washington so that folks aren't accidentally sending in building information from other markets accidentally.

And then the next really key thing to keep in mind is once you set up your report template and a report in Portfolio Manager, you can specify the reporting period that the information is going to correspond to. And this is key for you as a program manager level, I know, because some of you want to collect a single period, one year sort of snapshot of how buildings are doing in that one 12-month period. And it's good to be able to set that time frame so that everyone using this reporting template to report their results back to you, you know they're not accidentally sending you a different year. So that's really key. This is commonly used for programs that need to show annual results. And the disclosure cities are certainly using them.

Next, you can show a comparative time frame. So this is very helpful for grant programs or incentive programs or any program where you need to show all of your participants – get them on one baseline, let's say it's the year ending of 2010 and you want to compare all of those metrics you chose from 2010 to 2013. And you can very easily do that using this Portfolio Manager reporting feature. You can also just choose a range and get metrics on the annualized basis for that whole range that you choose. So there are lots of options and I know that time period is real critical for you at the program management level. Next slide.

This is just an overview, I don't want to go through these steps in detail. I wanted to put them here in the slide so that you have them. We've got them all documented for you in our quick reference guide that is linked to in the slide. As you're building your reporting functionality into your program just keep this in mind, you can create your custom report, you add your instructions that are specific to your program right into the Portfolio Manager reporting interface, which is great. Portfolio Manager will then create a unique URL so that you can use that report that you've created in your account and distribute it through that URL so that other Portfolio Manager users can access that template.

You distribute that through your program's website or perhaps you have an email distribution. And once the program participants or the buildings that need to comply with your policy, they access that URL, they can download it into their Portfolio Manager accounts and simply submit their building information back to you electronically where in your accounts you will then have all the information that has been submitted collecting for you on the building by building level. And then you can download all that data into Excel, XML, or PDF. Next slide.

And finally I just – before I sign off I wanted to – I know many of you have been joining. We had more than 2,000 people join our last webinar on our Portfolio Manager upgrades. The tool is currently going under a major facelift on the interface and also everything under the hood. We're very excited that the new interface will launch July 10<sup>th</sup>. And there is going to be a new look – a modernized and streamlined look and feel throughout. And I did want to highlight that as this is happening we have a lot of information on our upgrade project upgrade website that's on your screen right there; [energystar.gov/pmupgrade](http://energystar.gov/pmupgrade).

Please visit that for – if you didn't, if you weren't able to join our last webinars, we've got a whole series of quarterly webinars that we've provided on the upgrade project. All your data in your existing current Portfolio Manager accounts, including your templates and your sharing connections will be transferred. And the tool will be offline from June 26<sup>th</sup> to July 9<sup>th</sup> as we transfer all that information for you into the new interface. Next slide.

And finally, I just wanted to highlight that at EPA we're very hard at work right now putting together new training resources that go along with this brand new Portfolio Manager interface that will help you and your stakeholders get ready for the new way that the tool looks. And that will have – include getting started resources, a brand new series of webinars and recorded sessions that can be taken on demand, along with a lot of detailed help documents to help you understand the tool and help yourself and your stakeholders understand the tool.

Of course we've done this modernization project hopefully so that the Portfolio Manager can be used with a lot less training. But we realize that you need to deploy that locally and we wanted to put those resources out for you. So starting in May and June and then after the launch in July, EPA will be releasing all those resources for you. And last slide.

From at this website, [energystar.gov/government](http://energystar.gov/government) you can find a portal to all of the state and local programs that we've been tracking on the voluntary and mandatory side that integrate Portfolio Manager. And those include links to the programs themselves. So it's a useful portal. And the final slide is just more reference links and my contact information. So thanks so much for your time today.

*Joel:* Thanks Leslie. Thanks so much for all that information. And we'll just pass it on to Atlanta, so Maria and John, you guys can take it away. Thanks.

*Maria:* Thanks Joel. As Joel said, my name is Maria Quinones and I'm with the South States Energy Institute located here in Atlanta. And just to talk a little bit about South States, we're a nonprofit that promotes energy, water and resources for places of work, homes and communities. And we've been doing this throughout the Southeast for about 35 years now.

I'm here with John Bracey from Sky Energy and the goal of Atlanta's presentation, or our presentation is two-fold. First to discuss the Atlanta Better Building's Challenge, talk about what it is and where it stands today very briefly. But more importantly discuss the outreach and data collection techniques used to successfully benchmark this program, so how we engaged the community and collected data for the Atlanta BBC. Next slide please.

So we have one goal in mind with the Atlanta Better Buildings Challenge and that goal is to reduce energy and water consumption by 20 percent by 2020. Our focus has largely been in the downtown and recently midtown areas, two of the three largest commercial districts. But the momentum continues to grow as communities are looking to join in. Next slide.

So to give a little bit of background about the Better Buildings Challenge, the national competition was started by the Department of Energy back in June, 2011. And it started with three pilot cities. Atlanta was one of them along with Los Angeles and Seattle. Our mayor, Mayor Kasim Reed launched a program locally in November, 2011, so about a year and a half ago for the city's first sustainability plan. And currently the national Better Building Challenge has 36 community partners representing about 2 billion square feet. And out of those 36 community partners, only about 10 cities are relative to Atlanta in size.

So to provide some perspective of where we started, our goal, our target goal when we started in November 2011, was about 2 million square feet. A month later we were looking at 20 facilities covering over 20 million square feet. So our initial target more than ten times where our goal was. So you can see how big of an explosion this program had. And not to mention this is a voluntary program not a mandatory program. So we were definitely surprised. Next slide.

If we fast forward a year and a half later we're continuing to see this unpredicted interest on behalf of building owners. As I mentioned our goal was about 2 million square feet, however many facilities that took. By the end of the first month we had 20 facilities comprising about 20 million square feet. At the end of the fourth month, about 13 million more square feet, 21 facilities and so on and so forth. Today we stand at about 77 buildings or 50 million square feet. And sorry for the typo there. But I also want to mention that we recently had a reporting deadline and we were able to successfully report and benchmark 66 facilities out of those 70, which comprised about 37 million square feet. So we're very happy and enthusiastic about being able to gather so much information. Next slide.

And to kind of follow that last slide, there are many factors contributing to the high compliance rates in the Atlanta Better Buildings Challenge. And much of that success is due to the great public private partnership we have established here in Atlanta. We have over 20 partners spanning from local to federal governments, for-profit and not-for-profit sectors. And just to name a few, we have, of course, the city, and Central Atlanta Progress – Central Atlanta Progress is a community improvement district and who specifically manages the downtown area. And they, of course, created the Atlanta BBC primarily focusing in the downtown area.

We also have Midtown Alliance who recently joined in. And Midtown Alliance is another community improvement district who – and they administer midtown's participation. We also have a great partnerships with our three utilities; Georgia Power, our electric utility, Atlanta Gas Light for natural gas, and the City of Atlanta Watershed Department, who make the utility data accessible to us. Most importantly we have the Kendeda Fund and they provide the funding that covers the free assessments that we provide to our participants along with other resources, which we touch base on later. And I think it's safe to say that they are the essential catalyst of the program by providing the financial stimulus for this program.

And last but not least we have Southeast Energy Institute, who I work for. And we are the technical partner responsible for data gathering and ultimately tracking and reporting energy and water savings to the DOE for benchmarking purposes. And the fact that we have established relationships between partners – with many partners providing voluntary services is very important to the success we've had in engaging the community. Next slide.



So before I hand it off to John who's going to give you the recipe for what I'd like to think is our success, I'd like to tell you a little bit about what participants commit to and what we, the Atlanta BBC program commits to. So participants commit to a few things. They first publicly pledge to save 20 percent energy and water by 2020.

They also commit to developing a plan to implement the project that we come up with to reach those goals. They commit to sharing utility data using Energy Star's Portfolio Manager, which we've heard a lot about previously. And lastly, they commit to sharing the information about the tools, technologies, and processes used to reach these goals. And on the right you see a couple of our participants, the Georgia Dome, the very popular Georgia Dome at the bottom right and Bank of America on the left, Centennial Tower on the top.

So what did we, the Atlanta BBC provide? I think that the big one is we provide a free detailed energy and water assessment that results in a list of suggested projects that will help the facility reach that 20 percent energy and water reduction by 2020. We also provide free education and training seminars, access to capital and emerging finance models, like the PACE finance model and the TAD, or Tax Allocation Districts fund.

We also recognize their progress through marketing and PR initiatives. And lastly we promote a better marketplace engaging. You can see a figure, the figure at the right kind of shows that. It starts with the building owners providing their data, the Atlanta Better Building Challenge takes the data and transforms it to a practical project, or several projects. And we engage the marketplace who consist of service and product providers to take that information one step further to implementation.

And I'm going to pass it on to John Bracey, our partner here who's going to dive a little deeper as to how we actually did it.

*John:*

Well thank you guys for your time. I'm John Bracey with Sky Energy. We're one of the partners in the Atlanta Better Buildings Challenge. As you saw on that page there are a bunch of partners. A lot of cooks in the kitchen, but that actually worked out rather well. We provide the software platform where all the audits are done. And then that becomes a tool for the building owners that they can one, sort of track their progress in terms of utilities but also the specific opportunities that are found in the audit.

And two, they can share that anonymously with all the service

providers, distributors, product manufacturers, the rest of the people that would like to help those building owners implement some of the projects that came out of that with the goal of really just making that marketplace work a little better. Kind of like Match.com without the dating aspect of it.

So a couple of things that we wanted to go through in terms of – certainly the national Better Buildings Challenge, it's a national program, it's got a lot of buy-in from different people. We want to take that – the good parts of that and then really drive some of the local engagement pieces. Because everywhere you go it's a local market. So certainly on the recruitment side we wanted to kind of leverage some of those local relationships and make the people want to join. Real estate's very competitive in Atlanta, it probably is everywhere but it seems like it's especially so here. And so we wanted to kind of leverage that competition and competitive spirit within the program to help some of these building owners get the motivation to really make some improvements in their buildings. Next slide.

So in terms of recruitment certainly we started small and it kind of boomed. So our pilot, where we started off, was about 20 million square feet, which was too big to be honest. But we didn't want to turn anyone away so we've been defining the program as we've gone. And one of the things that was very critical to getting people engaged was that CID, the Community Improvement District. And one of the biggest things is that they already have the relationships with the building owners. So they are funded – CIDs are funded by sort of a tax the building owners self-impose because it helps drive some improvements in their community. So they already had the trust of those constituents, of those building owners. And so we didn't have to cross that bridge.

So once the CIDs bought into the idea it was really easy to have credibility to go to building owners and get them to sign off on the program. And also some touch things in terms of some marketing or networking events that we did were we actually got a lot of building owners in the same room with some of the service providers. We have \_\_\_ we stick in their front lobby so that people can see, newsletters, project highlights, all kinds of things we do that kind of show them some of the value from doing that. And certainly PR is one of the motivators for the building owners of what they can get out of the program. And a lot of the people that signed on first, some of those were kind of leaders anyway in the market.

And one of the goals that we wanted to do was allow some of those people to push along or drag along some of the people that may not be leaders. And not necessarily because they don't want to but because they don't want to have the information or the expertise or otherwise that they need to do that. So next slide.

So in terms of buy in, one of the – we bring a lot of value, we feel like. And I think that's evidenced by the amount of buildings that have signed on. But with that value, you have to pay for it. And the pay for it in our case is you have to share your data with the program. I don't know if we have a timeline on it, it might be in perpetuity, but in the short you need to share your utility data with us and then share your participation in the overall program.

We certainly try to make it easy on them but that's kind of payment for us. And that's a new thing for Atlanta, meaning we've never really had this much data; in terms of utility data, in terms of detail building characteristics and systems and performance at this scale. It's the first time we've had that. So it's very much a new opportunity for the city here. It's pretty exciting to do that.

We have these data agreements. I think they're one page, maybe two page. We try and keep them short. But something that tells the building owner real clearly what we're going to do with the data that they do share with us. There's a reason that they haven't shared it voluntarily, some of them are valid reasons and some of them probably are not. But we wanted to make sure they understood how we are going to treat that data and that it is confidential in that we're not going to publicly report their specific building unless they want us to highlight some of the results that we do. So that was something that, in our area, was pretty critical to getting that buy in was they understood clearly what we were going to use the data for, which was really for their benefit to help them move their buildings toward better performance. Next slide.

So a couple of things on how we're using the data in terms of driving the engagement with the building owners – Energy Star – a fair amount of buildings already use Portfolio Manager, probably half give or take. So most of those have Energy Star scores, a various range. That's a great 0 to 100 score, here's how you're doing. One of the things that we found that we think is pretty useful for them as well, and they've like is to kind of strip away some of the normalizations and have a – but really local – but really see how they compare locally to each other.

Meaning – a lot of these people are within hundreds of yards of each other in downtown Atlanta, or in midtown. And they kind of like to know – they may not be able who it is, but if you look at the chart at the bottom there, they get to see if they’re – in this case they’re the red one and all the rest of those are kind of middle of the pack. Or maybe they’re one of the leaders and they have the lower \_\_\_\_, or maybe they’re one of the laggards and have a higher number. But that’s something that we felt like could really help make a real specific impact on them in terms of where they rank and help drive the motivation to really engage in the program and engage with making improvements in their building.

On the other end of the spectrum, the top chart. Doing a top ten energy savers about – it really highlights the people who are leading in terms of improvements on their baseline. So there’s some good opportunities for building owners to get some good recognition and also to have some competitive engagement with themselves in that.

Another piece, if you go to the next slide there, is the case studies. And these are ones that we’ve put together on ticker buildings. We obviously got their permission to do it. One, they look pretty sharp. I’m not a graphics guy but I think they look pretty sharp. So these are things that they – we can certainly use to promote the program and get more buy in but also they can use it for their own to really sell what they’ve been doing to their constituents, to their tenants, so those people.

So it’s something that’s been beneficial for us to really highlight for them and also for other buildings who might have similar characteristics, they can get very local, “This is my neighbor down the street, what he has done specifically,” and hopefully motivate them and educate them on what they can do to make similar types of improvements. Next slide.

So a couple of things on how we use the data. So the audits that we do, I think there’s a fair amount of the Better Buildings Challenge programs in various cities, they do different things. Audits is one of the ones that we decided was important for us to do for a couple different reasons. But we think that the value that it brought to the program, the value it brought to the building owners, and our ability to have some visibility into what’s going on with their buildings, we felt like it was very important. So that was part of the assessment.

The opportunity that came out of that, unless we mentioned the

importance of engaging with the efficiency marketplace that's around there – obviously there's a lot of people around here that would love to sell the building owners and we wanted to incorporate some ways to help that process work a little bit better, and cleaner, and hopefully leverage some time and energy that goes into the audits to make that work better for them. Next slide.

Digging a little deeper in terms of the data that we get, this is just a quick snapshot of one of the ways we can help inform the building owners through the audit. It's not – it's a fairly detailed audit but it's also bound by the amount of time and funding that we have to do each one of them. But what we want that building owner to know is where is your energy going inside your building specifically. For a couple of different reasons; a lot of the building owners haven't seen anything along these lines. In this case you've got the model usages, the bars, and the redline is the utility measured usage.

So you have a pretty good estimate of where your energy is going inside your building. The other thing it allows the building owner to do is when they're sort of shopping improvement options out there, they've got a real strong baseline to work off of that they can make apples to apples comparisons from different providers who are going to use that. So we try to get fairly detailed and really educate the building owners as much as we could through the audit. Next slide.

And then for the opportunities, there could be a couple hundred opportunities in a sort of detail projects that are identified from the audit. The chart there at the bottom show I think a current snapshot. If you total all those up, what's been assessed so far, I think about 23 million or so square feet has been assessed out of the 50 that we've gotten. So having – certainly for the program being able to promote those, the overall progress – really looking for an opportunity of what's there in the buildings that they can pursue.

And then two, the detail behind it. The helpdesk sort of speaks specifically to them about the things that are going on in their building, the opportunities that they have versus just catching up with them and saying how are things going. WE can be a little more educated in terms of that conversation for – in discussing with the building owners. So that's one of the pieces we feel has been helpful for the program overall. Next slide.

And then in the marketplace engagement there's – the building

owner – one of the things we found, and this is all across the spectrum, but the building owners, for better or for worse. And some of these are the largest buildings in downtown, some of them are fairly small buildings, but somewhat across the spectrum. And even in the buildings that have the resources to do it, a fair amount of them get overwhelmed by how many – all the options that they could do for the building. There's a ton of different types of lighting retrofit options they would have for their building and they get a little overwhelmed in terms of the time and dealing with it. So what we wanted to try and do was make it easier for them once the foundation was built, which in this case would be those top four opportunities as an example.

Once that's built and we can recommend some of those things through the audit, to make it easy that would love to sell and serve those buildings and actually achieve some of those savings – to make – let them leverage that same data. So they like it because they don't have to go count lights again, for example. And they can take some of that effort and multiple different providers can use that same data to make – to try to get the fleshed out projects for those building owners. So they have real specific information about what their next steps are from that.

So we've done a couple of different things in terms of ways – we actually have a program coming up in June or July, I think, that has a fantasy baseball theme in terms of a way to connect building owners with service providers. I'm not playing that, so I'm not exactly sure how it's going to work but it does sound interesting at least. Next slide, or last slide.

Kind of lesson learned – lessons learned, which we have had a lot. I mentioned we have kind of been creating this program, not from scratch, but certainly defining what it was going to look like, what we were going to do. And so some of the things that came about were great and then some of them didn't work so hot and we sort of have moved on or not done those. But clearly in terms of getting the level of engagement that we had I think we had to show real value to the building owners.

Some of that is certainly through the audit that we were able to provide to them. Some of that is just having a real credible, specific way for them to get recognition for some of the improvements that – some of them may have already been planning on doing them. And it's a great way for them to highlight some of the progress their making on economic – attractive energy and water conservation measures.

In terms of momentum ours boomed quickly. And a lot of that was driven by some real strong engagement upfront from some of the local leaders in this downtown area. And that's something that worked very well for us. It might look different in other places, but certainly getting the leaders on board first helped us move forward. We did a lot of things. We were trying to try a lot of things and a lot of things probably had to fall by the wayside. So probably trying to do a couple of things well versus doing too much, something that we did.

And certainly program funding, meaning we were able to convince a foundation or foundations here that this was really worth doing. And we used the local utility and we had a good enough idea, good enough traction to pursue funding for it. So one of the things – that allowed our success to really happen. And then going forward we're looking at what are the ways to sustain that and keep the program moving in the direction that we want to go. And that I think is it from the Atlanta side.

*Joel:* Great. Thanks so much guys. So we're going to hop over real quick to Donna from the state of Washington.

*Donna:* Hi. My name is Donna Albert. I'm an engineer in the energy program at the Washington State Department of Enterprise Services. We provide services to other state agencies, colleges, school districts and municipalities. The energy benchmarking law, which became law in 2009, requires state agencies, colleges, and universities to track and report the energy use of buildings. And to complete energy ops for buildings identified as using more energy than average. An executive order that came out just last year applies to the Governor's cabinet agencies and that directed them to do the same and report yearly. Next slide.

Okay, some background. When building energy benchmark for state agencies and colleges was signed into law in 2009 our state was in an economic crisis. Essential agency and college maintenance services and facility staff were cut in the following years. The agencies and colleges had little or no money available for benchmarking activities. Our agency was tasked with creating the Portfolio Manager master account, hosting the agency and college energy data on our website, and reporting on progress. We have no authority over the other agencies or colleges. And there were no penalties for not benchmarking other than that the results are posted on the DES website.

The law also contains an exception that says requirements are null

if no funding was provided, which it wasn't. There was limited funding for DES to do our part. So we asked ourselves how we could help these agencies benchmark their buildings while they were so short on staff and funds. And with this exception in the law for lack of funding. So our strategy was to try to make this as easy for them as possible. So first we explained the benchmarking requirements to them. We used existing regular workshops and facility groups that the agency and college facilities' managers and business managers already attended to publicize the new law and explain what Portfolio Manager was.

We presented ourselves, the DES energy program as a resource to them. Then when we – when we saw after that effort many agencies and colleges still had not benchmark we listened to facility managers explain why they had not put their buildings into Portfolio Manager. And a lot of it was about lack of staff and funding. So we tried to find ways to make it easier for them.

So we announced the benchmarking effort. We started creating awareness of the law in our announcement of training sessions. We – our communication plan developed from the training session. Lesson learned, we could have benefited from developing the communication plan better at the start. This works best if you can use existing communication structures in your organization. And then if you can get top management support messages sent concurrently to the top, and also directly to the facilities management may help staff recognize that benchmarking is important to management.

Keeping an up-to-date contact list has been a constant effort. Sharing structure and facility names format establish what the completed benchmarking reports will look like, who will enter the data and who it will be shared with. Give instructions for facility name format so you don't end up with lots of buildings named warehouse or office with mysterious numbers and letters in them. And think about what the reports look like when you're giving instructions to people who will be benchmarking. Think of who needs to see, manage, or report on the data.

In our case we asked universities or large agencies to create their own sharing structures within their organization and only asked that they give read-only access to us. You can see examples of the step by step instructions and sharing instructions on our web page, which will show how we communicated all of this to the agencies and colleges. We also provided Frequently Asked Questions that were made up of questions we were getting over and over again.



Training. EPA helped us provide training, which was great. We provided free sessions in computer labs and the option of attending my webinar. We created the master account, provided sharing instructions, and then created groups to share into. Okay, next slide.

Okay the Department of Enterprise Services – it should say be a resource at the top, the slide. Oh yeah, sorry. Department of Enterprise Services was identified in the benchmarking law as the agency which would create a Portfolio Manager account for the agencies and colleges and report on the building energy benchmarking to the state legislature. The DES energy program took this role, we represented ourselves as a resource to the other agencies and colleges.

The website has been a great timesaver for me and a great help to our agency and college clients. It has links to the law and executive order, training, the EPA Portfolio Manager Log In page, and report. Also we've provided the step by step instructions and Frequently Asked Questions on this website, which are specific to our agencies and colleges. I think it is also helpful to have a real person to answer questions.

We experienced a large increase in the number of buildings benchmarked when a program of Washington State University Energy Program used grant funds to offer our agencies and colleges free or low-cost benchmarking services. So another lesson learned, we asked agencies what was keeping them from benchmarking, they needed help. An existing working relationship between our agency and Commerce, which is another agency, and WSU, which is one of our universities created an opportunity to provide free benchmarking services.

Upon request WSU Energy created Portfolio Manager accounts and entered buildings, meters, and data into Portfolio Manager for agencies and colleges that did not have the resources to do this themselves. This was at the worst of the economic crisis where many of the facilities' departments were cut to the bone, operating at very low staff levels. This free service made a big difference. Other agencies were able to use the resources provided by EPA on our website to benchmark the buildings themselves or they used energy services companies who were already providing projects for them at their colleges or agency buildings as a task in the energy performance contract. And there was, I think, one college who used students to benchmark their buildings. I was

disappointed that more colleges didn't try that.

Okay continue to improve. It's a journey. We found that many of our large agency campuses and our college campuses did not have metered buildings so meters are being added. Our benchmarking data is improving in quality and quantity over time. We set expectations, we asked agencies and colleges to enter buildings in Portfolio Manager, share buildings and campuses with DES, and keep their energy data current. We tried to keep it simple.

And then the law required that we post the energy data publicly. We used the website to do this. And I'm hoping that the new updated Portfolio Manager software will make this task even easier for me.

Identify errors and incomplete data. We identify missing data or obvious errors and point those out for correction. This is a work in progress. The quality and quantity of the agency and college data is improving over time.

And we're using the scores for energy use intensity to identify energy savings opportunities. Our client agencies and colleges benefit from benchmarking. They can compare the EUI of the building to itself over time, compare the EUI of the building with other similar buildings, identify energy saving opportunities, and track progress toward goals for a building or campus, and they can track agency-wide progress or agency goals towards the statewide goals that have been set for us to reduce energy use and greenhouse gas emissions.

Okay provide tools to take action to reduce energy use. It's helpful if you can provide tools to your clients. It will help them use the benchmarking data, take action to reduce energy use. We have a conservation – a resource conservation manager program, or utility energy conservation programs, or take your green to work programs. At DES energy we have energy savings performance contracting, which is its self-funded energy audit and performance program. We provide no-cost preliminary audits by ESCOS, which are kept under contract to provide investment grade audits and building energy retrofits, or state agencies, colleges, K through 12 schools, and municipalities.

Highlight successes. The first reports from legislature highlights example of successful use of successful benchmarking by our colleges and agencies. You can see it on our website. The last slide.

Here's a link to the energy program website where you can find out about energy savings for college contracting. And the energy program's Portfolio Manager website where you can see all the things that I talked about. Thanks.

*Joel:*

Great. Thanks Donna. And I just want to give one more thanks to all our speakers and presenters today, really appreciate it. We had some great information presented. I apologize that we have gone a few minutes over and there's a handful of questions that we have received through the question box. So what I'm going to propose is that we will respond by email to these questions and we'll send them out after the presentation. So I apologize that we couldn't cover these while we were in the session but I assure you that we will get back to you at least through email. So once again, thanks everyone for speaking and thanks for everyone who joined in today. And we will see you soon.

*[End of Audio]*