

Shana:

Ok, are you working with public transportation though to increase access to downtown?

Anton:

Oh yes, certainly.

Eva:

Maybe time for one last question? //...// Well, Anton, thank you so much for that presentation. That was very informative. I just want to say thank you to you and Steve. Folks, again if you could put your phones on mute—I heard some background noise; just to maybe minimize that?

Slide 1

I'm going to run through some of the work that we're doing at the EPA—some of you know where we are and some of you don't, so just to kind of bring you up to speed or bring you up to date. And then I'd like to give people an opportunity to introduce yourself to each other because I think there are definitely some synergies that I'm hoping that these conference calls or webcasts can help facilitate.

Slide 2

So, first, I wanted to present an overview of what our program does. Our program, which we're calling the Heat Island Reduction Initiative (HIRI), and it's been in existence for almost a decade now. We work on doing three things: building capacity—providing education, mainly through our website, which is one of the only websites on the urban heat island that exists, and presenting some outreach materials...brochures, just general fact sheets. And then fostering networks is another thing we can do. Supporting conferences and workshops. These webcasts are a way that we try to do that. Secondly, we try to turn research into guidance because I think there's a huge disconnect between the audience whom we work with, which are generally local governments, and researchers, especially the air quality modelers and the urban climatologists. They're really speaking different languages, so we really try to bridge that gap where possible and provide some tools and guidance. And I'll talk a little bit about our urban heat island compendium later. And then we just try to stay engaged in what's going on and fill gaps. So, keep abreast of the current research, we work a lot with state and local governments. And, I'll give you an example through this Transportation Research Board sub-committee that we've just launched. Just to clarify, it's just me working on the program. I say we, but it's me—and I have some support with contractors and some co-workers help me out here and there, but I'm the main face of the program.

Slide 3

So, in terms of building capacity, I want to give you examples in each of those three areas. Our website, as I was saying, is one of the main ways where we provide education

and information about what we're doing. And, we're going through a revamp right now. The biggest changes are that we're going to take some of the detailed content off of the site and put it into PDFs that can just be downloadable, and just provide more summary information on those top-level pages, because, apparently, that's the way that people like to see information. They either print it out or they don't have time to read it, so we'll give them the one-page overview on a screen-shot, and then point them to a PDF that provides all of the resources that they might need on that topic. The other thing that I'm really looking forward to doing is, currently, every time we have these conference calls we do have meeting summaries and we post the PowerPoints, but I think it's posted in a very un-user-friendly format. And again, if you press F5 you can get a better screen shot so you can see, we tend to just list the calls by date. And, someone has to click on that to see who presented. And, I think now we're going to organize these by subject matter so that you can just click and see who presented on green roofs, and just click on that presentation right away. So, it will be organized by subject matter instead of the date, or now that we're moving to conference calls, the date of the webcast.

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Next, in terms of turning research into guidance, we've been working on, or I've been working on, this urban heat island guide book for a long time and I'm sorry it's taking so long. One of the latest things that has happened is that we've changed from calling it a "guidebook" to a "compendium," because as we were working through it I was saying, you know, this is really not providing hand-holding guidance. I don't think that we're at that point where we can do that, but it is providing a good summary of information on the topic, and pointing people toward resources for more information, and examples of what other groups have done, because, it's best to go to a city to see how they've advanced cool roofs in their building code, rather than talking to me, who's two levels removed from it. So, that's one big change. Secondly, we're going to actually post the chapters as they become available. So, we'll get them to you sooner, instead of waiting for a whole compendium. I think that's another thing that's holding us up. We already have a cool roof chapter that looks pretty decent, and I think that we can post that in the next couple of weeks, and we'll probably have to make adjustments to it as other chapters evolve, but at least people can get the information that they want a little sooner. Just to reiterate, this compendium is focusing on the mitigation strategies...so, providing an overview of cool roofs, of green roofs, of urban forest trees, and some information on pavement—but there are some gaps, so I'll talk about that later. There will also be some material on the urban heat island phenomenon, the causes, the impacts, and I think one of the things that might be most useful is kind of an overview of the different activities going around in the U.S. Because I don't know how informed everyone is, it's just so hard to keep track sometimes. Lastly, now that we're talking about climate change, we're going to talk more about the connection between the urban heat island and global climate change.

Slide 5

So, lastly I want to point out, in terms of filling gaps, I don't know how many of you are familiar with the TRB, but it's a group that really brings together all of the transportation

professionals, transportation professionals, engineers, together in one forum. And, what we were finding is that there's a lot of demand and momentum for guidance on pavement. There is information available on roofing, for example cool roofing, even green roofing, and urban forestry. There are a lot of groups out there doing work in this area, but in terms of pavement there's a big void. Most of the research we've done in the past focused on solar reflectance. So, lighter-color pavements tend to be cooler. But, when you look at the implementation aspect, it really raises a lot of issues. What is the cost? What exactly are the benefits compared to a darker-colored pavement? What about other considerations, like safety, or the fact that pavements dirty over time?

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So, we hired Cambridge Systematics, a consultant, to issue this cool pavement report. And, we launched a workshop where we brought together a lot of researchers. And, we also formed a partnership with Arizona State University and in past calls they've presented on some of their pavement work, and they really have extensive facilities for lab and field experiments, and they're working on developing the next generation of building and paving materials. They have a staff call and email help center, which is really just one person, again in that sense, but it is someone who's an expert in that area, and I was finding that I couldn't answer some of these technical questions and I really needed some assistance.

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So, this partnership with ASU is really helping out in that way. What happened this year is that we were able to launch a TRB sub-committee called "paving materials and the urban climate." Anyone is welcome to join the sub-committee as a "friend," where you'll receive correspondence about what's going on. But there's going to be a core group of people who keep the momentum of the committee going, where we try to keep abreast of who's doing pavement research in what areas, try to get a call for papers going for the next transportation research board conference, which is always in Washington, D.C. in January—just to try to get some of the key questions answered.

Slide 8

That's kind of a very very quick overview of our program, and I just wanted to highlight some of the upcoming events that you might want to keep track of or just have in the back of your mind.

Slide 9

And lastly I just wanted to make one other mention of another program, this past year I launched with a co-worker called the Clean Energy Environment Municipal Network. The goal of this program...it's just an informational, peer exchange network. So, we're trying to advance clean energy. And, by clean energy I mean energy efficiency, renewable energy, and clean distributed generation. You could look at our website just to

see some of the stuff we're coming out with. In this program I'm also trying to launch a webcast series—instead of being quarterly, we're looking at it being monthly starting in February. I'll send information through the urban listserv group so that those who are interested can sign up for this. The first call will be on navigating the grant process—mainly the Federal EPA grant process because we've heard a lot of questions about that. So, that's our logo.

Slide 10

Lastly, I want to save the last 15 minutes of the call to kind of hear from you what's been your involvement and interest in urban heat island-related work and what's going on in your community. And, I already talked to Tucson, ACT, and Dallas to start of this dialogue. And, I'm sorry, if you have questions, maybe it's best to just email me and I definitely will respond. I just want to let you all have an opportunity. I don't want to hog the conversation. Irene, do you want to start off?

Irene, Tucson:

Sure, Irene, city of Tucson. They created a new position—the urban landscape manager, so, that's me. And, basically I work with a number of departments within the city. Probably about seven different departments. And, I think Eva summed up some great stuff on her slide about what she's trying to do with HRIs, and then the first being building capacity. And, I think that's generally what we're also trying to do within the city itself. The city employs 6,000 people and if I could even get to half of those people to understand what urban heat island UHI is all about, I think that's a big step forward. So, yearly we have an UHI conference that's geared toward city staff and also to committees, commissions, and boards, since they are making the recommendations to the mayor and council. Eva has participated in one of those last year. It was basically about roofs. What's happened with all of that is basically that the city staff has become much more aware about heat island and mitigation measures, and so it seems as though we're talking a lot more about it amongst ourselves. The other thing that happened within the city was the manager created the office of conservation and sustainable development. And so, they've been very much involved in climate change issues. So, very similar, and almost together in what we're doing. But, of course, what I'm trying to do is relate it more toward the UHI issues and how to mitigate those within an urban environment. And as we proceed, we have also teamed up with the ASU Smart Center, so Jay Golden and Chamile Commish has also come down to Tucson. And the city itself is also doing some work with porous concrete, as well as work with looking at the green roof issues. So I'm glad I have a contact in Seattle, Steve, because I've been following your Green Factor quite closely—being where the city can potentially implement some codes for new development. And then, I have also heard about Houston and what you're doing in terms of your vertical gardens. But that also I think, the city has been really great and working with the transportation department. We're in the conceptual stages of a roadway project, which will be detached and have 20-30 ft high retaining walls. So, we're looking at the idea of vertical walls to reduce heat capturing within those very concrete and asphalted roadways. I guess that sort of sums it up.

Eva:

Ok, thank you.

Jared Lou, ACT:

We are a coalition of about 150 organizations in 39 states around the country and Canada, and we mainly work to promote the work that those organizations are doing. We are a research consumer, so calls like this and work that the Forest Service is doing, the work that the EPA is doing, a lot of the work that the community here is doing, we pay attention to that and try to filter it out to our members so that they can put it to work in their local communities. We do some national advocacy work on the Hill. We worked on the Energy bill last year to try to make it more tree-friendly, to try to make it more economics and community development oriented, and maybe lastly I'll mention that we do things like this webcast as well. We have a monthly series called the brownbag lunch series. Some of the calls would be very similar to this type of topic and some wouldn't. Some are geared towards how to start a tree group. And some are things like getting into green roofs, partnerships with utility companies, smart growth, trees and transportation—so there are a number of issues that overlap a lot with UHI. So, I would welcome anyone to sit in on those, they're free. You can find out how to register on our website. If you can't find it, email me, because we are working to arrange the website so it's a little more obvious where it is. We have things like Community Tree Leadership Forum, which is a partnership with the Arbor Day Foundation for how to operate a tree group. So, various trainings and electronic mediums like that as well. So, I'd be happy to answer any questions about what we do, or field anything else. Feel free to call me off line too if you'd like to join our coalition. Thanks, Eva.

Caller:

Sorry, could you re-cap who you are and where you're from.

Jared Lou:

Sure, Jared Lou, from the Alliance for Community Trees. We're in College Park Maryland just outside of D.C. but we work with about 150 different organizations around the country, mostly non-profits, but some city or other municipal tree organizations.

Jeff King:

Are you working at all with Gary Allen?

Jared Lou:

In Annapolis, the Center for Chesapeake Communities?

Jeff King:

Right.

Jared Lou:

They are a member.

Jeff King:

Ok. He last week called me and said last week he was trying to organize a big Washington area metro tree canopy management meeting on February 20th. If you haven't heard about it, you might want to pencil that in.

Eva:

And I'll add that those webcasts, the ACT ones, are really fantastic, so I can send it out on a listserv. And next, Dallas. Is Steve Howser on the line?

Steve Howser, Dallas:

Yes ma'am.

Eva:

Can you introduce yourself?

Steve Howser, Dallas:

My name is Steve Howser. I am the chair of the Dallas Urban Forest Advisory Committee. I am also a consulting arborist by profession. A brief amount of history is not all that pretty in the city of Dallas, I guess. But, our number one objective in the city has always been more economic develop or related competition between the city and suburbs. There's never been a formal forestry program in our city, or an effort to manage our urban forests. Or, even any city-wide effort to plant trees that we've lost due to development. Area growth patterns are more geared towards sprawling outwards with hard-scapes, instead of with smart growth or building up-and-down. So, in other words, we're starting to learn, and starting to catch-on in the area. Around 12 years ago we were able to enact our first tree ordinance, but it was fairly ineffective, primarily due to concerns of its effect on development in the area. So, around five years ago we were able to enact some positive changes to the tree ordinance, but there were still a few loopholes that were left, which allowed trees to be removed without being mitigated, which is a concern. I'm trying to be brief, but around three years ago, thanks to a grant from the Texas Forest Service, we were able to convince city council to hire our first urban forester, which is a big step forward. Around the same period of time, thanks to strong support from Mayor Laura Miller, we were able to establish the Dallas Urban Forest Advisory Committee as a permanent part of city government. We decided not to be a board or a commission due to the politics involved. The city of Dallas is a council district-type of government, and the district people tend to want to do more what's best for their district than what's best for the city many times so at times it's difficult. So, since the establishment of the committee, we're still in the stone-ages, I guess would be the briefest way to describe it—we're learning how to rub two sticks together to create fire. But you can find out how far we've come if you want to visit our website, it's very simple to remember, it's just dallastrees.org. That's dallastree.org. Our number one objective in urban forests is the urban forests survey and analysis—we can't manage an asset we don't fully understand, and we have to have the baseline data, obviously. Many of you folks are well-aware of that. So far we've raised 80,000 dollars, which we're proud of to get that accomplished. I'm also an advisor to the Vision North Texas Partnership, which is working to plan our future regional growth. And, I've recommended a forest survey inventory and analysis for the entire region. However, if

you want to find out what we're doing as far as planning in the area of growth, we're expected to double in terms of population in the next 20-30 years. The website for that is fairly simple. It's just vnt@planforaction.com. Other current objectives include establishing a department of urban forestry, obviously, and a significant budget that would help to support that. Many other objectives and goals are listed in our current 2008 work-plan, as well as our two-to-five year plan. So, more to the point, word of the heat island effect came to the Dallas area in 1995. Being a long-time contributor and friend to tree issues, took an interest and funded at least in part if not all of the first study of the Dallas heat island problems. It was done by Dr. Ken Morgan with the Dallas Christian University, and I can forward a copy to anyone who may have an interest in it. So, this was done in 1995. We thought it was big news—took it to the media, which basically had no interest at the time because it was deemed to be anti-development, which wasn't good for us, we thought it was significant news many years ago. When Laura in the Office of Environmental Quality decided to complete another study recently, I was thrilled to see the interest that was expressed, as well as, once the study is complete, we'll be able to compare 1995 to currently. So, David Hitchcock, as well as others involved from the EPA and the Office of Environmental Quality have provided an outstanding education to me, anyway, on many different subjects that include air quality—which we're locally struggling with our state implementation plan, which has not been approved by the EPA. So, much of what I've learned, few arborists or foresters in the area are fully aware of many of these issues. So there's a great need to educate many of the people in the state of Texas. So, in conclusion, we've come a long way in the last few years. But, man do we have a long ways to go to catch up.

Eva:

Thanks, Steve, that's a great update. Since we only have three minutes left on the call, does anyone else want to introduce themselves? If not...

Ash, CARB:

What I'm going to encourage is that I'm going to be sending to Miss. Wong a carbon calculator, and I want to encourage every one of you to use this carbon calculator to begin to establish GHG signatures for buildings that you're sitting in. The other thing that I want to encourage is to begin surveying appliances of all sorts, including refrigerators or whatever else may be near you, and try and establish climate change or GHG signatures. One thing I want to kind of make clear, and I'm going to write an email to Miss Wong on this issue: from now on, in order for us to make progress, any progress at all, including getting monies, grants, and all sorts of things, we need to be talking either in tons of carbon, or tons of Eq carbon, or in Watts/sq meter. And, unless we can generate data like that, we're not going to get the necessary attention and the necessary resources in the struggles that are going to be forthcoming for this well-deserving area.

Eva:

Thank you, Ash.

Caller:

Eva, will you be forwarding that information to all of us?

Eva:

To be honest, I will forward everything that I can. What I can't, I will give the email address list to, and maybe ask that if there's something that's a little sensitive that, you know, might put me in a difficult position, I'll let you send people that email, if you understand.

Caller:

Could you just give us Ash's email and we will descend upon him.

Eva:

That's another way to do it. But I will make sure that you can get the information. It might not be directly from me, but I will follow up. I guess just in conclusion. I would really appreciate hearing back. Is this webcast format a good way to go? I assume all of the people who were on were able to get on. But, if you know people who had difficulties, let me know because I need to know if this is a good way to continue to proceed. Also, if you like hearing from each other, should we make it a point on every webcast to have that kind of a forum? Feedback would be great. Thank you everybody. The next call will be in April. I already have some presentations in mind. But, if there's something that you want to hear about, or if you have a suggestion, then feedback is always welcome, so please let me know.

It's 3:30 and I'm just going to end our call now, and just thank everyone for participating.