

# Green Infrastructure and Smart Growth Webcast Transcript

Tuesday, September 3, 2014

## Speakers:

- **Eva Birk**, ORISE Fellow
- **Melissa Kramer**, Senior Policy Analyst, EPA's Office of Sustainable Communities
- **Caran Curry**, Interim Assistant City Manager, City of Little Rock, AK
- **Heather Nix**, Clean Air & Water Program Director, Upstate Forever, Greenville, SC
- **Erika Hollis**, Clean Air & Water Project Manager, Upstate Forever, Greenville, SC

## Transcript:

### Slide: Introduction

#### Eva Birk

Hi everyone and welcome to today's EPA webcast. We're going to wait one more minute on the line here to have folks filter in to the webcast room and then we will get started.

All right, folks, we're going to go ahead and get started. Good afternoon and welcome to today's webcast, titled Green Infrastructure and Smart Growth. This webcast is sponsored by EPA's Office of Wastewater Management, and my name is Eva Birk. I'm an ORISE Fellow with EPA's Green Infrastructure Program, and I'll be moderating today's webcast along with my colleague here, Emily Ashton, so thank you for joining us.

### Slide: Logistics

Now before we get to our presentations, I'd like to go over a few housekeeping items. First, we will have a question and answer session at the end of the presentation, so to ask a question, just type your question in the "Questions" box on the control panel, and click the "Send" button. If your control panel is not showing, click on the small orange box with the white arrow to expand it. You don't need to wait until the question and answer period to submit your question. There are a large number of participants on the line today, and so we highly encourage you to submit your questions early and we will try to answer as many questions as possible at the end of the webcast. However, due to the high number of participants, not all questions will be answered, so please feel free to contact the speakers after the webcast—they're happy to answer your questions.

Speaker contact information will be available at the end of the presentation, and the other thing that will be available that we get a lot of questions on at the end of the presentation is a slide deck, full slides that you've seen here today and also a transcript of the speakers' remarks. So if you have to leave early today or if you couldn't make it, we will go ahead and share that on our U.S. EPA Green Infrastructure website one to two weeks after this broadcast.

So if you have any technical issues such as audio problems, please click on the "Questions" box, again to the right-hand side of your screen. Type in your issue and press the "Send"

button. Emily and I will do our best to troubleshoot on our end over here, and you're also free to call the GoToWebinar support number listed on our screen—it's 1-800-263-6317, and give the assistant our conference ID number also listed there.

Last but not least, we'd like to remind you that the views and materials presented by our speakers today are their own and do not necessarily reflect those of EPA.

### **Slide: Webcast Agenda**

With that, I will get into what we're going to be covering today. So today we're going to be talking about green infrastructure and smart growth. To help us get into the details of this very broad subject, this presentation will focus on two communities that are successfully leveraging green infrastructure as part of wider planning and community development efforts. We're lucky to have several practitioners on the line today and on hand to provide insights into a variety of smart growth tools that can actually help communities achieve better water quality, something that we here at EPA care very much about, while reaching wider community development goals.

So the tools that we'll be covering today include but are not limited to things like complete green streets, minimizing or removing local parking requirements—my personal favorite, local code review, and last but not least, the most popular topic thus far in terms of our registration survey that folks want to know the most about is stormwater banking. So our goal today is to have practitioners walk through specific lessons learned by implementing each of these strategies on the ground, in communities, and we've heard from a number of municipal practitioners and staff in particular that tuning into this series, they found it particularly helpful to have fellow practitioners share lessons learned, and that's been the most valuable way of getting detailed information out and about from practitioner to practitioner. Especially, we've heard from folks that are looking to implement similar strategies on the ground in their own communities, so we'd like to continue with that practitioner-to-practitioner sharing today.

### **Slide: Now to our speakers!**

So with that, now that we've established our focus and frame for today's webcast, I'd like to kick off today's presentation by introducing our speakers. First up, we're going to hear from Melissa Kramer of the Office of Sustainable Communities, also here at U.S. EPA, who will introduce their Greening America's Capitals program, which is a program that seeks to promote the use of green infrastructure and neighborhood planning initiatives. Then, we'll hear from Caran Curry of Little Rock, Arkansas, who received a Greening America's Capitals grant to create a vision of revitalizing Little Rock, Arkansas' main street corridor. Last but not least, we will hear from Heather Nix and Erika Hollis of Upstate Forever, a South Carolina non-profit, who will share their recent effort to kick off a stormwater banking program—very interesting stuff—for the city of Greenville, South Carolina.

### **Slide: EPA's Greening America's Capitals Program**

So in summary, we're hoping that by sharing these two scales of experience today—you know, a main street revitalization project in Little Rock, Arkansas versus some broader policy changes underway in Greenville, South Carolina—that these two stories will help us get a better picture of how exactly one gets these smart growth initiatives involving green infrastructure off the ground at the local level.

So with that, I will now hand it over to my colleague, Melissa Kramer, at the U.S. EPA's Office of Sustainable Communities, who will give a brief introduction to the Greening America's Capitals program. So take it away, Melissa.

**Melissa Kramer**

Okay, thanks, Eva. As she said, I'm just going to give a quick background on the program. It has been in existence since 2010, and the goal of the program is to illustrate what sustainable communities can look like to help generate enthusiasm that we hope will actually catalyze implementation of the plans that we create.

The project areas that we look at vary. They are all in state capital cities, but they focus on neighborhoods, business corridors, plazas, and smaller, well-defined areas. We look for places that are highly visible within the state capital and use strategies and solutions that are replicable with the hope that then the city can use them throughout and even broader within the rest of the state.

The process we go through is that we invite mayors of the capital cities to apply, then a multi-agency review panel selects the cities that we'll work with in a given year. We then create a scope of work that's based on the city's proposal and their goals for the city. We then go through a small business contract to hire a design team, often with local experience in the city we're working in. That design team then conducts a two-and-a-half day charrette in the capital city with stakeholders to help take community input to generate the overall vision. Finally, we have a design report that we present to the city and in the end, as I said, the goal is overall to help—to make sure that the city is able to implement the vision.

**Slide: Capital Cities**

This slide just shows a list of the capital cities that we have worked with so far. The 2013 cities, we're in the process of doing right now and we're about to announce the selection for the 2014 cities soon.

I just wanted to run through quickly a series of images from the final reports to give you a sense of the kind of issues that these communities have worked on.

**Slide: Boston, MA: City Hall Plaza**

Boston City Hall is in the heart of downtown. The plaza surrounding it was conceived as an outdoor civic space, but it currently has few trees and little vegetation, and it's hard to get in and out of or walk around in it. The goals of the redesign were to create well-defined edges and entrances, provide more bike access and bike parking, and connecting the plaza better to existing streets and increasing the amount of green space for better stormwater management.

**Slide: Hartford, CT: Capitol Avenue**

The City of Hartford requested EPA assistance to re-imagine a mile-long portion of Capitol Avenue, a focal point of the city that includes the Connecticut State Capital and Legislative Building, the State Capital, the Supreme Court and the State Armory, as well as residential and retail areas. The redesign focused on public open spaces such as parks and the state building grounds, and green street improvements that better managed stormwater, improved the environment for pedestrians, and encouraged future development.

**Slide: Charleston, WV: Slack Plaza**

Charleston, West Virginia requested EPA's assistance to redesign Slack Plaza, which sits in the middle of Charleston's downtown and is the site of the country's major transit hub. Three city blocks run through the plaza and serve as a pedestrian connector for two primary commercial areas in the central business district. We worked with the city and stakeholders to establish a vision for Slack Plaza as a multi-modal transportation hub and town square by adding public art, trees, and redesigning pedestrian corridors.

**Slide: Little Rock: Main Street**

We assisted Little Rock with streetscape improvements, helped catalyze the redevelopment potential of their main street corridor. You'll hear much more about this one later from Caran, so I'll just stop there with that.

**Slide: Jefferson City, MO: Wears Creek**

Jefferson City requested EPA assistance with an area of the city core that serves as the gateway to the state capital and larger capital complex. The area is flood prone and includes a number of vacant properties and parking lots. The assistance aimed to improve access to the Missouri River and integrate Brownfield cleanup and redevelopment on currently vacant lands.

**Slide: Washington, DC: Anacostia Metro Station Area**

The Anacostia Metro station is in the eastern part of the city in an area that the city is expecting to see significant increases in population due to nearby development. The design team focused on safety concerns at the intersections, increasing the overall permeability of the area to manage stormwater, creating a strong community identity and creating better connections to the nearby Anacostia River.

**Slide: Montgomery, AL: Selma to Montgomery National Historic Trail**

The City of Montgomery asked for assistance to create design options for improvements to the historic Selma to Montgomery National Historic Trail as it passes through a freeway interchange area. I'm going to start speeding up here a little bit, just for time.

**Slide: Lincoln, NE: South Capitol Area**

Lincoln, Nebraska focused on the South Capitol neighborhood, a primarily residential neighborhood directly south of the capital.

**Slide: Jackson, MS: Congress Street**

Jackson requested assistance to develop design concepts that use green infrastructure for Congress Street and two public parks along the street to improve the—make it more bike and pedestrian friendly and connect better to adjacent neighborhoods. I'm having a little trouble advancing the slides.

**Slide: Phoenix, AZ: Lower Grand Avenue**

The Lower Grand Avenue in Phoenix is core and adjacent to downtown state capital, and Phoenix requested assistance to improve the arboreal streetscape of the area.

**Slide: Des Moines, IA: 6<sup>th</sup> Avenue**

Des Moines, Iowa received assistance to incorporate green infrastructure elements into a proposed streetscape plan for a one-mile segment of the 6th Avenue corridor, which serves as a northern gateway to the city's downtown and provides direct access to the Des Moines River.

**Slide: Helena, MT: Last Chance Gulch**

Helena received assistance to improve Last Chance Gulch, which is a street that connects the business district with the historic downtown.

**Slide: Baton Rouge, LA: Downtown Greenway**

Baton Rouge got assistance to plan a greenway in the heart of Louisiana's capital that will connect Louisiana State University with downtown. There will be a nearly three-mile pedestrian and bicycling greenway that links parks, businesses, and cultural destinations.

**Slide: Indianapolis, IN: City County Building Plaza**

Indianapolis received assistance to enhance the walkability of streets and revitalize public plazas in and around the Market Square redevelopment neighborhood.

**Slide: Frankfort, KY: Second Street**

Finally, Frankfort received assistance to enhance the Second Street corridor between their historic downtown and the state capital.

**Slide: Results**

As I said at the beginning, we were really looking for places that have been able to implement their plans, and this is just a sampling of the places that have been most successful in actually moving their projects towards implementation. These are generally longer-range plans, and since we've just started in 2010 we're quite happy with the amount of progress that we've been able to see cities are making. Little Rock is one of the best examples of this, and so we're going to be hearing much more about that from Caran. There is more information on the EPA Smart Growth website under Greening America's Capitals.

**Slide: Smart Growth**

**Eva Birk**

Great, awesome. Thanks, Melissa, for that wonderful introduction to the program. With that, I'm going to hand it over to Caran Curry and Little Rock, Arkansas, who will go over in more detail, as Melissa mentioned, regarding their specific Greening America's Capitals project.

### **Slide: Caran Curry**

So while Caran is getting her slides up here—oh, she was so quick! They're already up. I'm going to give her a quick introduction.

So Caran Curry is an attorney who has managed grant projects for over 35 years. Most of her career has been spent in the criminal justice field where she managed a state agency which provided support services and grants to prosecuting attorneys and crime victim service organizations. For the last six years, Caran has been instrumental in expanding the City of Little Rock's grant projects and is especially proud of her primary project, which is to revitalize the city's abandoned and neglected Main Street into a thriving 24/7 chic urban district using green infrastructure and creative place making.

So Caran, that sounds like very exciting stuff. I've looked at a project report and seen some of the pictures of plans for implementation on the ground, and we're very much happy and excited to have you here to share the story of the Greening America's Capitals project in Little Rock. So with that, I'll have you take it away.

### **Slide: Creative Corridor Initiatives**

#### **Caran Curry**

Well, thank you so much, Eva. I'm excited to talk with you all today about Little Rock's project, and we currently call it the Creative Corridor, and that's where we've brought together a wide range of partners and together we've brought back our Main Street, primarily using green infrastructure. So today—hold on one second—I am going to tell you our story. I'm going to discuss our challenges and I'm going to provide you with some tips if you're considering something similar.

### **Slide: Our Story, Challenges, and Tips**

So first, a little bit of background information. Little Rock, of course—and I've got a millennial here to help me because something just blinked. So, all right. Let's go back up here from the beginning—here we go.

### **Slide: Little Rock**

Little Rock, of course, is the state capital and it's the very center of our state. Population of Little Rock itself is approximately 200,000. Greater Little Rock is something, 725,000, and we're really excited because we've just been named number one by Kiplinger's Best Places to Live for the year 2013 of any mid-sized city.

### **Slide: Picture from 1906**

Now this first picture shows what Main Street looked like back at the turn of the 20<sup>th</sup> century. You can see a fair number of people there, a number of different transportation modalities, buildings—you know, you can kind of see energy happening there. Then the next shot is really a study in contrast.

### **Slide: Picture from 1955 and 2001**

You're seeing the 1950s, 1960s Little Rock Main Street. It was a vibrant, typical downtown. It was at the very heart of Little Rock—and indeed, it was at the very heart of the entire State of Arkansas. It was Arkansas' Main Street, if you will; it was Arkansas' downtown. Pretty well everyone in the state came here to shop, came here to play. This was the economic center. It was a happening place. I know for me as a child of the early '60s, I saw housewives don their hats and their white gloves and go downtown to shop. As a young teenager, I would ride the bus down to Main Street and go to one of the music stores and spin—you know, take a preview listen of one of the Beatles' new 45s as they come out before I would use my allowance to purchase it. So you kind of get the picture—everybody came there.

Then you fast forward a little bit to the 1970s, and there we had urban renewal. Unfortunately, Little Rock excelled at it. We really nailed it. We did great at getting that grant money, and what was that grant money for back then? It was to tear down tons of buildings, and what we did as a result of it is that we yielded Little Rock's largest land use, which is still the largest land use to this day, and that is parking right in our downtown area.

If you fast-forward again to the 1980s, our Main Street was closed to traffic. We again tried the latest thing, which at that point in time was to shut down the streets, put up a mall and have everybody try to go inside, and that was really and truly the death nail which almost totally devastated our Main Street. Main Street from there just kind of died a slow death. There were neglected, abandoned buildings. Luckily enough, I guess for us, the grant money kind of dried up and they quit tearing it down. We had a few buildings that were still there. They utilized skywalks so that employees who were working in the buildings could go from a parking deck into the building without ever having to set foot on Main Street.

Then lucky for us, Bill Clinton was elected to the Presidency. He decided to locate his Presidential Library on the banks of the Arkansas River, and what you're seeing there are a couple of different shots of the library.

### **Slide: Picture of the Clinton Library**

The first one in the upper left-hand corner is from inside the library, looking back down toward our downtown area. The other one on the upper right is a photo of the library itself, and then another one is the library kind of cantilevers out over towards the Arkansas River.

But as this was located downtown, our power brokers came together and they decided to meet once a week. They decided to consciously create and revive this area of town adjacent to the library, and therefore our River Market area was born. This is a very vibrant, 24/7, sustainable area. It's really quite a touristy kind of area, but calls to mind kind of the—it's sort of like a little mini Quincy Market, or if you've ever been to the Baltimore Inner Harbor or the Dallas West End, it's just kind of a really cool, fun place to be. A lot of people were very surprised in Little Rock that we were able to create something like this and get it going.

The power brokers that were the ones that decided to really work on the project still to this day, so for over a 15-year time period, they meet every Thursday at 1 o'clock and get together in order to discuss what's going on in this particular area, what needs to be done, and they really hold the note and ensure that this area continues to work.

### **Slide: Picture of River Market**

So with this as a backdrop, our new Mayor was elected in 2006. He was an attorney with a background in historic preservation, and so it was only natural then when he was at a watering hole during a national mayor's convention that a newfound buddy gave him a tip that he ought to participate in the Mayor's Institute on Design. So if you haven't heard of this, this is an opportunity for mayors to take a trip out of state where they implant a chip or have them drink the Kool-Aid or whatever, but they come out learning and knowing about the importance of design in economic development, and what all it can do for a community.

### **Slide: Streetside Rain Garden**

Now, our Mayor quickly became a true believer and invited the Mayor's Institute to town in order to hold a three-day charrette for a couple of hundred participants in order to work on our almost-totally abandoned Main Street. I think the thing that really came out of the Mayor's Institute that was so good, the Mayor's Institute went through, and they did a list of what was really working about this area and what was not working. One of the things that they noted was that we had really good building stock. We had a lot of buildings that had been abandoned on Main Street from, say, the mid-70s sort of on, so no one had really tried to do anything with them and the buildings had good bones. Architecturally, they were beautiful, they're very interesting, they're distinctive, and they're kind of different.

Another thing we had going for us was that Little Rock was not hurt as bad by the economic downturn or by the Great Recession as were a lot of other communities, primarily because we did not have quite the real estate bubble that a lot of other places did. So while we did get hurt by the recession, it was nowhere near as bad as a lot of the other—you know, a lot of other places.

Another thing that we had going for us was that we had a good team in place. We took the team, i.e. the power brokers from the River Market that brought that area of town back into being, and added two new folks to it, primarily the Mayor and then me, and set to work. Now, the Mayor's Institute on Design also noted our—you know, the con, or what was going to be the hard part, and pretty well that this was going to be Mission Almost Impossible.

Then about this time, EPA announced its Greening of America's Capitals, and so the Mayor and I love a good challenge and we were bound and determined we wanted to be in the first group to be selected for this Greening of America's Capitals. We did indeed get in the first group and EPA funded a charrette which yielded a report, as noted before, by the noted architects, the landscape architects Nelson Byrd Woltz, and this is a picture out of the report. It goes through and just talks a lot about the potential things that could happen in Little Rock.

What this did for us is that it created a vision. It got people excited. When we were in the room working on the charrette, it was almost like this synergy was created and people began to get—I was there, it was palpable. We had people suggesting all different kinds of things, and it made it into the report and it was just like Little Rock started to buzz. Now, we did have our people that were not believers, and I must say I'm typically a bit of a pessimist and so I was not one of them from the beginning, going, oh boy, these are really things that are going to come into fruition. I was more or less like, there is no way we're going to get the money to be able to implement some of this, so we are creating an expectation, and we cannot deliver.



But be that as it may, the Greening of America's Capitals just opened our eyes up to the possibility. It was like you have what I call a Two Rivers expert come into town and say, "Hey, have you all thought about this, have you thought about that?" Then they produced a rather lengthy document, and if you get the time, go on out on the Greening of America's Capitals website—I've provided the citation there—and take a look at our particular document. Also while you're there, take a look at the rest of them.

So once that was over, that also gave us some idea and a vision, and then we next decided to go for a project through the National Endowment of the Arts, and it's called an Our Town Project. What that does is to—and we selected the design component. We hired a couple of noted architects through a grant and were able to have them come up with a revitalization plan. So while the—I kind of view the Greening of America's Capital is the very first schematic designs that were very general, that just kind of sort of had a possibility of what things might look like, took a lot of creative license, and it was great. I thought Nelson Byrd Woltz did an absolutely wonderful job, and of course EPA's Sustainable Communities section held our hand through all of it and they helped us as well.

But then as we were on to the NEA Our Town, we were able to really start to focus in more on this particular area, and since we selected architects that also were the architectural professors at the University of Arkansas, we wound up in one way or another getting a lot of architectural students involved in our particular project, and so we—I think we definitely got a fabulous deal on that. The end result of it is the thing that's called the Creative Corridor Main Street Revitalization.

### **Slide: Creative Corridor**

What they suggested that we do is that we adopt creative place making, and that is a thing where you really use the energy of artists and relocate them back into an area, and using that creativity you then begin to develop, and economic development moves back in the area. So we went and started partnering with our Repertory Theater and they had recently, even in the midst of the recession, completed a \$6 million revamping of their facility right in the middle of this neglected downtown with almost every single building that was surrounding them vacant. Using that as the core then, we invited the ballet company, our symphony, and other visual artists to begin to come back in and inhabit a lot of the abandoned buildings. We had developers that were interested. We got Brownfield grants for them, and now you are seeing some of the ideas that came out of the Creative Corridor.

You're looking at a very livable, mixed-use space. We are—it would be a neighborhood for all income groups mixed with cultural and workplace function. The design focuses on reclaiming the non-traffic social activity found on Albright Street. There'll be dining there, there'll be gathering places, assembly places, strolling. There'll be recreation, et cetera. We have some really and truly, some really pretty cool looking ideas that they came up with.

### **Slide: Picture of a Light Garden**

What you see around the right-hand side of this particular picture is called a Light Garden, and in it, while they are going to replace some of the lights on Main Street, they gathered up the ones that were in the process of coming out and reclaimed them and aggregated them in order to put them kind of on an interesting, sculpture-like kind of garden. The clock that you see over

on the far right used to be on one of the buildings and indicated a jewelry store, and so now it's designed to be out there and be freestanding.

**Slide: Picture of an Alley**

Next, you see what is known as an alley—I hope I'm saying that correctly. This is an area that's going to be right in front of our symphony, which is depicted over on the left-hand side. There is a sort of a boardwalk in it, there is a bioswell where the water can go through and filter. This will be in our 500 block of Main Street now, very close to our Repertory Theater. This is—really, this is a synopsis of everything that we had, the different strategies that we're working.

So the Creative Corridor process through the NEA grant was again another design conceptualization, so we wound up starting to try to find ways in order to leverage and pay for some of the implementation, and we came across a grant from the Nonpoint Source Management, it's (319) program, out of EPA. For us, we call it—we are implementing a water quality demonstration and education program. We're going to demonstrate the benefits of—and you can see some porous pavers over there. There's a tree well and a rain garden, which is going to filter a lot of the water.

**Slide: Demonstrate Benefits**

It's using low-impact development. Here you have some of the designs that the architects wound up putting in. Again, our plans for the 100 block of Main, I'm not going through them but just kind of showing you a little bit about the scope of our project here. The second 100 block will wind up being used as an educational area.

**Slide: 200 Block Main**

One of our partners is a school—we'll see them in just a little bit—and they will come over, and we have a number of different educational areas in the 200 block that will wind up being able to educate our youth.

**Slide: 300 Block Main**

Three hundred block is again using a lot of the same—porous pavers, rain gardens, et cetera; and

**Slide: 500 Block Main**

500 block is where our arts groups are primarily aggregating.

**Slide: Street View Picture**

Again, just some different shots of different portions of our project. I would like to note that we are in the construction, sort of at the first phase right now. A lot of times, I really refer to this as the ugly duckling phase because everybody has seen all these gorgeous pictures from the Greening of America's Capitals grant and from the Creative Corridor, and right now this is pretty well what they are now seeing, and it's like, well, wait! We thought we were going to get all this color, and instead one of our challenges are the expectations that we've had of the

pictures, as opposed to what it currently looks like. Now, we do think pretty soon, once it's not quite so hot and we're able to do some more plantings, it's going to look a lot more lush.

### **Slide: Educate and Involve the Community**

The other really important component of it, we're not just greening up and doing the green infrastructure. We're really holding public meetings; we're making sure that the public knows what we're doing. We're doing this in a lot of different ways.

### **Slide: Partner eStrem Public Charter School**

We're also running programs on our Little Rock cable TV channel, which is a tip, I would like to say. If you are lucky enough to have your own television channel and be able to make documentaries, this is a great way to educate, and your granting agencies absolutely eat this up with a spoon. We'll of course be having signage on location in order to show people just exactly what it is that our greenscape is doing. We are partnering with a public charter school that's located adjacent to the second 100 block.

### **Slide: Challenges**

Some of our challenges—first of all, one of the hardest things has been learning the new language. I still don't have it down pat. Our project manager from our state granting agency, the Arkansas National Resources Commission, has tried to train us not to use the term stormwater and instead use the nonpoint source. We have yet to kind of master that, but we do try.

Another challenge that we face was concerning the replacement of trees. Trees were a relatively new addition to the landscape, having arrived in the 1990s, as you saw from the earlier pictures. If you look back to the turn of the last century and from the 1950s, you didn't really see any trees, but they did get planted in the 1990s. So when I'm talking about tree replacement, I don't want you to be thinking about some small, gorgeous southern city that has these huge, gigantic oak trees that line its main street. That was not what was happening here. Instead, we had mature trees about 24 feet tall, but they had reached their ability to continue growing. An arborist said that they were at the end of their life span and they would probably have their root balls ruined by the construction process of the installation of the rain garden. So if you're contemplating a project with tree replacement, please contact me at a later date to discuss this more in depth. We had a lot of long-term stakeholders who were very attached to those particular trees, and I'm using a bit of an artistic license here by saying they did almost everything short of chaining themselves to the trees to keep those trees from coming down. But consequently, our message and our energies were really diverted by this kind of, I guess I'm going to call it a Treegate, but it was a tree challenge at a minimum.

### **Slide: Results**

The end result of all of this has been we now have stimulated just on our Main Street and a few blocks alone, so far to date \$76 million worth of economic development. The buildings are now getting full. We are just in the phase of a lot of them coming back online after having been in a position having them be retrofit.

I want to talk a little bit about—let me talk about just timing challenges. In some ways, I almost feel like this is just like an IT project—however long you think something is going to take, you just take it and multiply it out by four times because that’s how long it’s actually going to wind up. Sometimes almost any construction projects are that way, but we quite frankly have had a learning curve in just trying to implement the green infrastructure. For example on the porous pavers, we were trying to figure out which side was actually up, and if you don’t get it right, it ruins your warranty.

Let’s talk a little bit about tips. I like to keep my grant monitors informed. Even though our Greening of America’s Capital took place in 2010, to this day when I still have a success, I will email my project managers at Greening America’s Capitals about it, and in fact the particular slide that you’re seeing right now is one that my grant monitor made from all kinds of things when I—all kinds of news reports where I was sending it to Washington DC to say in essence, look what you helped us do, look what you helped us to create.

I also want to say as somebody that’s been involved in grants for a long time, be sure to take your grants folks, particularly your grant writers, to the Smart Growth seminars, encourage them to listen to these kind of webinars. There’s a whole entire language and nomenclature that’s out there that you really kind of have to learn and pick up, and I’m not one where it’s all trippingly off the tongue. So please, help educate them because they will help you in the long run.

We also kind of wound up in a deal where since we’re the capital city, no one else from around the state likes the City of Little Rock to get or receive any grant money. While our state granting agency took a risk on us on some of the EPA money to do some of the implementation of the grant infrastructure, they got all kinds of calls saying, why are you spending money on these people in Little Rock? Those people have money—which we don’t—but why didn’t you do it out here? So if nothing else, when we wound up on the front page of the newspaper, everybody is calling them going, we want some of what they’re having. So I think our grant agency, while they couldn’t fulfill all the requests, at least it has become a very high profile program within the state.

### **Slide: Image of Newspaper Headlines**

I’d also like to say, get the best design professionals that you possibly can. Sometimes you need a Two Rivers expert to come in and say things that maybe a lot of the local people know and say, but somehow when somebody else says it then it winds up working. We had a lot of pressure to use the locals, but we would not have gotten the grants that we did since we used architects that were actually used to competing on a national basis for awards, and they were used to competing within National Endowment of the Arts grants. They really knew and held our hands through that particular process.

### **Slide: Thank You**

Finally, I’d like to say thank you, particularly to Clark Wilson at the EPA Sustainable Communities, to our local grant manager, Tony Ramick at the Arkansas Natural Resources Commission, to those at the NEA who have been there for us, all of our partners and stakeholders—we could not have done it without a cast of thousands, so to speak, and finally to a wonderful staff, Debbie Carrera (ph), our CPA, and Larra Bender (ph), our office assistant. Thank you much.

## **Eva Birk**

Great, thanks Caran for that wonderful presentation. It's good to get a more in-depth view of what's happening in Little Rock. I think your story is very important because it talks about tying in water quality initiatives to larger redevelopment efforts like Main Street in Little Rock. I learned a lot by listening in.

We had a lot of good questions rolling in from audience members on the line. We're going to hold all the questions to the end of this presentation and then we'll have a chance for Melissa, Heather, Erika, and Caran to answer all the questions together as a group.

So what I'm doing right now is going ahead and sharing my screen and launching a poll to see how many audience members are on the line, and we'll wait for just a minute or two here while we populate that poll and get an idea of how many folks are tuning in. In the meantime, Caran, thanks so much for that wonderful presentation. It was a good start.

## **Caran Curry**

Thank you.

## **Slide: Improving Water Quality Using Compact Development And Smart Growth Techniques**

### **Eva Birk**

All right, and then with that, we have about 75% of the folks voting on the line—I'll take that as a statistically significant sample. We'll move on to introducing our next round of speakers. So I'd like to head over to Greenville, South Carolina and introduce Heather Nix and Erika Hollis, who both represent a regional non-profit there. So while I'm giving slide presentation ability to them and having them bring up their screen, I'll go ahead and introduce Heather.

Heather Nix joined the Upstate Forever staff in 2007 and is the Director of the Clean Air and Water Program, which focuses on issues ranging from stormwater, land planting and design, to air quality. Heather received her BS in Biology from Winthrop University, and before joining Upstate Forever she was a project manager at an environmental consulting firm. Her main focus was wetland delineation and permitting, construction site inspections, and industrial facility stormwater inspections, so she's very much from the world of stormwater. She knows the nitty gritty of what it takes to really tie all the pieces together to come out with a good water quality result. Previously, Heather gained a variety of experiences working at Glacier National Park in Montana, a chemical manufacturing facility in South Carolina, and onboard commercial fishing vessels in the Bering Sea.

Then we will also hear from Erika Hollis, a Project Manager in the Clean Air and Water Program at Upstate Forever. Erika joined Upstate Forever in 2008, and since that time she has been working on projects related to stormwater management and low impact development techniques. Erika's responsibilities also include educating municipal governments, the development community, and the general public on impacts of nonpoint source pollution on water quality in urban areas.

So with that, I'll hand it over to Heather and Erika, and thank you both again for joining us today.

## **Female Speaker**

Thank you.

### **Slide: Upstate Forever**

#### **Heather Nix**

Thanks Eva. This is Heather Nix, and I'm going to start out. If you're not familiar with Upstate Forever, we're a membership-based non-profit working throughout the 10-county upstate region of South Carolina that's highlighted on your map that you see on the screen. Our mission is to promote sensible growth and protect special places, and the projects that we're going to tell you about today were possible thanks to funding from an EPA targeted watershed grant and from the V.K. Rasmussen Foundation. So not that they necessarily endorse the products that we're going to talk about, but they help support completing them.

### **Slide: Stormwater Banking**

The stormwater banking program is a voluntary program that will provide an additional option for developers and will help improve water quality. We developed the residential program in partnership with Greenville County and the commercial program in partnership with the City of Greenville. I'll start out with the residential program, and then I'll turn it over to Erika Hollis to tell you about the commercial program.

Upstate Forever partnered with Greenville County to create the residential program, but we also had a number of specialists from Clemson University on our team and we collaborated with a large, diverse group of stakeholders throughout the process of creating this program. One tip to everyone—I can't emphasize how important it is to engage with your stakeholders, also to make sure that you are clear on what their expectations are for collaboration, and be sure that you've met those expectations as you're moving through the process.

### **Slide: Stakeholder Requests**

The main request that we had came from the development community, and we were able to incorporate several into the stormwater banking program, specifically a more predictable process to allow higher density and infill projects and also flexible setback and lot size requirements.

### **Slide: Program Cornerstones**

There are three main cornerstones of the program. First, it's voluntary, so developers will only use this if they want to. It will reduce cost and it will improve water quality throughout the entire county.

### **Slide: Program Steps**

There are three main steps to the program. The first step is that the developer determines if their development is eligible and they then choose to participate. Step two, the developer participates, they pay a fee, and they receive a single-family residential density bonus. The third step, the county who is administering the program will use the funds generated for water quality improvement projects throughout the entire county.

### **Slide: Benefits to Developers**

Since it's a voluntary program, it will obviously have to provide enough benefits to developers for them to choose to participate, so in addition to the single-family residential density bonus, participating developments will also receive more flexibility to allow them to more easily build the density. The increased flexibility includes no minimum lot size, approval for single family attached housing, and also reduced setbacks.

### **Slide: Eligibility for Voluntary Participation**

There are four main requirements for participation in the stormwater banking program. First, it will operate within a limited area of the county that's shown here in grey, and that's to encourage economic development in areas that already have services and infrastructure in place. To determine the program area, we analyze the county at a sub-water sublevel for numerous factors that would indicate that that area was appropriate to the type of development encouraged by this program. We then took the highest scoring sub-watersheds and we combined them to create the program area. The second requirement of participation is that a development attain a minimum score on the decision-making tool, and I'll tell you more about the decision-making tool in just a minute. Next, the development must be approved through a streamlined county council approval process, and lastly the developer pays a participation fee to Greenville County.

The fee structure, which was developed in conjunction with a Clemson University economist, is based on several factors and is intended to profit the developer enough to incentivize participation while generating sufficient funds for stormwater retrofits. It was a priority to make the program usable by developments at all price points, so the average price of lots was one of the factors included in the fee formula.

### **Slide: Decision Making Tool for Earning Points**

This is a snapshot of the decision-making tool, which is a Microsoft Excel-based interactive scoring tool that awards points in three categories: the regional, neighborhood and site scale. A development must earn a minimum number of points to participate in the program, but it's similar to the LEED certification that there are lots of options for how the developer can earn those points. A higher score indicates that it's better for water quality, so higher scores are also incentivized by if the developer meets additional point thresholds beyond the minimum.

### **Slide: Earning Points at the Site Scale**

The site scale mainly focuses on improvements in the stormwater runoff from the site, and these points can be earned by using the types of low-impact development techniques that you see on your screen or by redeveloping a previously developed site.

### **Slide: Earning Points at the Neighborhood Scale**

The neighborhood scale awards points for designs that encourage more transportation options and efficient uses of infrastructure. These options lead to healthier communities that can save residents money, and several studies in the last few years by the National Association of Realtors and the National Homebuilders Association found that Americans' preference has

really shifted to this type of safe and healthy community, so this program will help encourage and incentivize developers as they are responding to changing markets.

### **Slide: Earning Points at the Regional Scale**

The regional scale awards points for infill sites, locations near a variety of commercial uses, and sites that minimize impacts to environmentally sensitive areas like the outstanding resource water or river that you see here, and that also would include avoidance of developing things like flood plains, wetlands and steep slopes.

Once the developer confirms that their development meets the minimum, they can choose to continue participation in the program by going through a streamlined council approval process and paying the participation fee. The developer then receives a single-family residential density bonus that's based on their site's location and what is recommended for that location on our county's approved future land use map. The typical densities allowed by the program are shown on your screen, and these densities could vary widely and should depend on what type of development is appropriate for your community. So if you are interested in adopting this program, we'd recommend—for our community, it worked well to tie it to that future land use map, and so that obviously could look very different depending on if you're—how urban or rural your community may be.

### **Slide: Stormwater Banking Program**

The final step in the stormwater banking program is for the county to complete projects that will improve water quality throughout the entire county.

### **Slide: Improving Water Quality Throughout Greenville County**

There are many areas throughout the county that were built before stormwater controls were required, and they could benefit significantly from the improvements that can be paid for by the participation fee fund. Not only does that directly benefit the community where these retrofits can be installed, but it also helps improve water quality and relieve some flooding issues throughout the entire county.

### **Slide: Potential Future Sediment and Nutrient Reductions**

We also worked with Clemson University on some water modeling, and we found that if this program is fully implemented, it could prevent a significant amount of stormwater and pollutants from being generated by future developments, so this is good for improving water quality, reducing flooding impacts, and also saving everyone money.

### **Slide: Summary of Residential Stormwater Banking Program**

In summary, the stormwater banking program is a voluntary program that will add flexibility for development, efficiently use existing county infrastructure and financial resources, and improve water quality throughout the county.

At this point, I'll turn it over to Erika Hollis and she'll tell you about the commercial side of the program.



## **Slide: Stormwater Banking Program - Commercial**

### **Erika Hollis**

Hi, my name is Erika Hollis, and I have been heading up the commercial component of the stormwater banking program for the past several years. Upstate Forever partnered with the City of Greenville and Furman University to develop an incentive program that was focused on improving the water friendliness of commercial developments in the City of Greenville. So after discussions with many stakeholders, we decided it would be good to focus on revisiting surface off-street parking lot requirements in the region because parking lots make up such a considerable portion of commercial developments and they also, as we all know, have significant impacts to water quality.

### **Slide: Parking Study**

Over-built parking lots are a common site here in Greenville, as I'm sure they are across the United States, and unfortunately the parking requirements that are behind a lot of these huge lots are often based on national parking data that was compiled during times of what is considered peak usage. So for example, in the case of a commercial retailer, those are the days between Thanksgiving and New Year's, and for anyone who has ever braved shopping during that time, they know that shopping during that time of year is much different than going out on a normal day. Obviously, it seems strange to build parking lot requirements to accommodate these high levels of demand when we really could use that land for a better use, as we saw in the Little Rock presentation.

### **Sorry—it's not advancing. Okay.**

So we brought this information to the City of Greenville's planning and development office, and they said that they would be interested in seeing how their parking requirements fared in comparison to parking usage in the city. So with them and Furman University, we sat down and we developed a parking study of 120 parking lots throughout the city, encompassing a variety of commercial land uses. I'd like to mention that we did not include the central business district in this study.

### **Slide: Aerial Surveys**

In order to accomplish this fairly daunting task, we did two different types of surveys. We did aerial surveys during times of peak usage, so we did one on Black Friday which for those of you who do not know, that is the day after Thanksgiving; and then we also did another fly-over on a day in March to get an idea of what typical usage was. We also did on-the-ground surveys for the smaller parking lots and we took three counts for each site during the time of peak usage for that particular land use.

So—I'll wait until you can see it—okay. These are some images of some of the sites that we took pictures of, and we have pictures of both the Black Friday and the typical day. Obviously the sites that are fuller were taken on the Black Friday. We used these fly-overs because it allowed us to capture a lot of data for the big box retailers that are along our major corridor in a short amount of time. We then took these images, downloaded them onto the computer, and then counted all of the parking cars in all of these pictures—and it was a lot of pictures, and fortunately I was able to get a volunteer to help me do this—and we entered all this information into a database.

### **Slide: On the Ground Surveys**

The next type of surveys were on-the-ground surveys, and those we were able to get Furman University students to help with this portion of the project. For this, we would go out to a site and we'd take three measurements of each parking lot during the times of peak usage. Now, peak usage for these would vary because obviously a bank has a different peak operating time as opposed to a restaurant or a grocery store, et cetera. So we got the information on what was considered peak usage for that particular land use from the Institute of Transportation Engineers' Parking Generation Manual and also from talking with staff at the City Traffic Engineering office. These counts were then taken and also entered in the database, and this information was used to estimate peak occupancy rates for all the various land uses that you see. These are just images of a few of some of the commercial establishments that we took measurements at.

### **Slide: Parking Study Data**

So with all of that data, we were able to summarize and find that based on this information, here in the City of Greenville they have an average of between 30 and 60% too much parking available for the commercial land uses you see here. We felt that these findings were fairly significant because it shows that there is a lot of land that is tied up in the form of a service parking lot when it could be used for a more suitable or highest and best use. The City of Greenville itself to a geographic extent is not that large, so the fact that a lot of this land is tied up in a parking lot just indicates that there could be a better use for it.

So we used this information and then determined what we are calling ideal parking ratios, or parking ratios that are more reflective of actual parking usage for these commercial land uses, and we made sure to include a 15% buffer, which for people in the parking world, it's called the parking efficiency factor. You try to design parking lots so that there is always a little 15% wiggle room so people can get in and out efficiently. So we did take that into consideration when we came up with our parking ratio, and Upstate Forever collaborated with the City of Greenville and we were able to modify many of their off-street parking requirements, making sure that they would have enough parking and so satisfy demand.

### **Slide: Parking Recommendations – Commercial Land Uses**

The numbers you see here represent what we're suggesting to be the maximum allowed parking space requirements for the different land uses, based on the data that we collected; so essentially, the numbers you see here are the maximum amount of parking you would need to satisfy what is considered peak demand for the land use. In the case of a discount store, we're saying that you would need at maximum two spaces per 1,000 square feet, and you would be able to satisfy the parking demand in Greenville. That may vary depending on what city or county you're working with, but these are the numbers that we felt were appropriate based on the data we'd collected.

### **Slide: Conducting a Parking Study**

I've been asked by numerous people what was involved in conducting a parking study. It may seem daunting, the fact that we were flying over in planes to collect this information, but it really is not rocket science. Any municipality or county government organization could do that. Some tips for groups who may be interested in doing that are, one, I would pick sites that are

good representatives of the land use that you're interested in getting information on, and it's really important to get input from the staff who work on this, and in our case that was the planning and development staff with the City of Greenville. For the data collection we did aerial surveys, like here in South Carolina we were fortunate that there is a group based out of Asheville, North Carolina, which is about an hour away, called SouthWings that provides free flights for conservation-related projects, so we applied and we were fortunate to secure two free flights based on our application. You don't necessarily have to do an aerial survey, but you may want to consider it if you're trying to get the big box retailers, because it's a little hard to see all the sites from one particular location.

On-the-ground surveys are really good for getting information on smaller lots. They can be more time intensive in that you're driving all over town, but in that case we were fortunate because again we utilized students from the local university, so if you can find volunteers to help you collect data, that would be really helpful. I would also encourage that if you do send students or volunteers out, provide them with a letter from the local government explaining the program so that if they are approached as to why they are on site and what are they doing, we had one of the students to hand them to say the city is doing a parking study, and so on and so forth. I don't think the students ever had to use it, but at least it made them feel better if they were going to be approached.

As far as supplies, you really don't need much. You just need a video camera and obviously a computer to download the images. Safety vests are great and the students loved wearing those, as did I; and tally counters are really helpful for when you're walking around parking lots so you can keep track of all the spaces that you're counting. So again, it isn't a complicated process, but you just need to get organized and get your sites established beforehand.

### **Slide: Stormwater Banking Program – Commercial**

So back to the commercial component, because we recognize that there are going to be situations when a developer wants or needs to install more parking than is allotted to them by their particular land use, we wanted to give them some flexibility because we did not want to push developers out of the urban core and further out into the county and contribute to urban sprawl. So we're giving developers essentially three options when they decide to build parking lots in the City of Greenville. The first is that they can build the number of sites they're allowed based on their code. If they need more, they can then choose to install some sort of low-impact development technique to deal with the additional runoff that is generated from the additional parking spaces, or they can pay a fee of \$750 per each additional space and that money will then go into a fund that the city will use to deal with water quality issues at their discretion. The fee of \$750 may sound high or low to you depending on where you are in the country. For us, we based this number on low-impact development options that we considered that would be most realistic for a surface parking lot in upstate South Carolina, so we looked at the cost of porous asphalt, pervious concrete, bioretention, and turf paving, and came up with a fee of \$750.

### **Slide: Example Low Impact Development Options**

Finally, these are just some of the other low-impact development options available that a developer can put on site. It's not limited to these. Obviously, the engineering department has to approve these, but this is to deal with the additional runoff from the additional spaces the developer would install.

### **Slide: Summary of Commercial SBP**

So in summary, the commercial program of the stormwater banking program, a developer can install the minimum required amount of parking space as allowed by code. If they want to install additional parking, they can use some form of low-impact development to manage that stormwater or they can pay a fee in lieu of that, the fee of \$750 for any additional parking space above the minimum required. Again, the fees go into a dedicated fund to be used for water quality improvement projects.

### **Slide: Expanding the Stormwater Banking Program**

So we're really excited about these programs being recently adopted in both the city and in the county, and we're continuing to work to get all these programs adopted throughout Greenville County because it would operate more seamlessly if it were to function in all of the municipalities you see on the screen. When we were designing these programs, we wanted to make sure that they were broadly transferable, because the problems that we are facing are not unique to our area. They are throughout the country, and so we're hoping that we were able to provide you with some tools that you can use in your community to address similar issues in your area.

### **Slide: Thank you**

So with that, I'll wrap it up; and again, we need to thank EPA's targeted watershed grant for funding this work along with the V.K. Rasmussen Foundation and Fujifilm, and if you have any questions, feel free to contact Heather and I and we'll be happy to talk with you.

### **Eva Birk**

Excellent. Thank you, Heather and Erika, and with that we're going to move on into some questions. We've had a lot of questions rolling in from audience members, and if you still have a burning question, feel free to submit it in the Questions box right now. What I think I'll do, after I make sure that Caran here is unmuted—all right, I'm unmuting you, Caran, because the first question is for you.

We want to—several practitioners actually asked about what benefits were the most popular, if you will, with local community members in terms of selling the downtown revitalization project, especially on Main Street. We wouldn't imagine that water quality would be the greatest selling point for a Main Street project, but did you find that after doing some preliminary messaging that water quality tied into why stakeholders signed on to develop the project, or was it a combination of that topic, traffic calming, economic development, actually making the Main Street district a more livable location? What did you find were the most resonant themes within your community?

### **Slide: Speaker Contact**

#### **Caran Curry**

Actually, I wish I could say that it had been those, but unfortunately it wasn't. The bottom line was we were pretty desperate. This was a totally abandoned area, and the fact that all the stakeholders, potential stakeholders were all coming together to work on this, I think they saw when we had the opportunity to do this, I mean, they saw it as a really great first step in the implementation of all of these kinds of plans. So that was the first thing, actually, that we were

able to obtain some money for in order to start implementing the visualizations and the dream that we had created for ourselves.

### **Eva Birk**

Great. Along the same lines of that initial question, we had two practitioners kind of dial in with a question about needing city council approval or not for the specific Main Street revitalization project, and how in general you got this large amount of stakeholders on board to not just support the project but eventually implement it, after the grant period has ended.

### **Caran Curry**

Well, we spent a lot of time on education and as each grant would end, we would have press conferences and talk about the project. We actually had an educational endeavor when we came up with the Creative Corridor plan. We kind of quietly unveiled it to the choir, if you will, because actually we had not seen a lot of the—we had not seen a lot of the images and that kind of thing as to what the plan was supposed to be. So it was really great when it turned out so wonderful, then we wanted to share it with everyone.

So we put out the word that we were going to hold a noontime session and invite the architects in to explain to the community what we wanted to do with it, and with that a three-day notice, we filled an auditorium entirely of, like, 300 people who came to just sit and learn for two hours and listen to a very educational lecture about this.

What we also have found lately is that it's now been two years since we did that and since our construction project is taking so long, we now need to do that education again. So in November, we have planned a session where the Boards of Directors of the city, our brand-new tech park—which I forgot to talk about—our Chamber of Commerce, our downtown Little Rock partnership, which plays a huge role in this endeavor, almost all of the Boards of Directors of the ballet company, the symphony, the Repertory Theater, will all be invited to attend another lecture, if you will, on exactly what it is that we've done so that they can all learn the wording, they can learn the nomenclature, they will be able to have porous pavers and bioswales come trippingly off the tongue.

### **Eva Birk**

That's all we can hope for over here. Great. So one last question for Caran, and then we have a few more questions that everyone can chime in on, and some specifically for Melissa and then Erika and Heather. So one last question for you, Caran, was there any concern over gentrification of the Main Street corridor there where you had a strong artist community, and how did you address those concerns?

### **Caran Curry**

We are—actually at the beginning, it would be suggested to us that that could occur, and we were very Pollyannaish in thinking oh, if we only had that problem, that that would mean our project was a success. We actually now have seen because the downtown is now beginning to be full, we have seen places start to raise their rent and that kind of thing. So we have not dealt with it yet, so that's one of our very next steps—you know, what are we going to do? So I would like to make this pitch—if anyone out there who's dealt with that successfully, please drop me an email and let me know what you have done.

We do have a lot of surrounding areas, though, that are adjacent to—you know, because the Main Street area is literally a corridor of a couple of blocks long, so there is plenty of room in there for everyone.

**Eva Birk**

Great. All right, thanks Caran. That's a great perspective to bring in. Thank you so much for going into detail and taking the time to really share with us some lessons learned on the ground there in Little Rock, Arkansas.

There will be one or two questions at the very end for everyone to chime in on, but at this point I'm going to turn to Melissa here at EPA headquarters and ask her a quick question that came in from a listener, just talking about wider themes that she's seen over the expanse of the Greening America's Capitals program. So what were the greatest challenges to implementation a year after the grants went through and these community visions started to be manifested within plans and documents and reports? Was parking an issue that occurred, were there any other issues and challenges that you saw playing out as a theme across these different grantees?

**Melissa Kramer**

Well certainly the overall greatest challenge has always been to find money for implementation, so we try to work with our communities to identify all the different sources that are available to them. But beyond that in terms of just getting the community behind the vision that was generated, certainly parking is an issue; but just more broadly any time communities are looking at having to lose something that they currently have, whether that is parking or an additional lane of traffic or what have you, that can always be challenging and people are concerned about what will happen when that occurs. I think what we found is the overall success of the Greening America's Capitals program is that you can create visuals that allow people to understand not just what they lose but what they gain, and that can be a much more esthetically appealing area that's more easy to walk around, easy to bike in, also has a better environmental outcome.

So generally, we find that the greatest support comes from the people who participated in the charrettes with us and the opposition tends to come from people who are new to the ideas that the cities are trying to implement.

**Eva Birk**

Great, thanks Melissa. Good lessons learned. Now turning on to Erika and Heather, can you guys hear me okay?

**Erika Hollis**

Yes, can you hear us?

**Eva Birk**

Are you unmuted?

**Erika Hollis**

We are unmuted.

**Eva Birk**

Excellent, excellent. So one question that came in for Upstate Forever was: Is there a reason that you didn't include the downtown commercial district in the parking study?

**Erika Hollis**

We were asked by the city planning department that that was not allowed, that they did not want that included in the study.

**Eva Birk**

I got you—okay. Thanks for answering that. Then in general, we had a few questions coming in in terms of what were the biggest questions that developers and commercial property owners had for you as you were developing the stormwater banking system and the credit system, whether it was useful to have like a fact sheet on hand that you could say, this is the justification for why these numbers exist. What were the first conversations like that you had to walk through with the development community and the commercial property owner community?

**Erika Hollis**

Well, we met with numerous stakeholders. We did meet with numerous developers and ask them about what they thought were the big obstacles to development in the area, and many of them brought up parking, some saying that they were being required to put in more than they needed and how that results in additional funds that they would rather spend elsewhere. Others, which were typically the national retailers, were requiring greater amounts of parking than the local ones, so they were all—once we showed them the data that we collected, everyone was very receptive to the modifications that we were showing. I think the data was really important. We wanted to emphasize that we did not want to create a parking—we didn't want to make this so that there wouldn't be enough parking. We wanted to be very cognizant of what the parking needs were in the area and wanted to accommodate that, but that we wanted to work with them to find ways so that they could really think about what they actually needed and build their lots more related to that, more in relationship to what the actual usage was. In turn, that saves them money, so that was a way that we really were able to convince a lot of developers of this option.

**Eva Birk**

Great, that's good info. Thank you, guys. Then one other question that came in was how do you—have you dealt with or heard of or had any developers work through ideas for creative ideas for peak parking? So if there is—you know, I've heard in some areas developers have thought of using for commercial development, like, gravel parking lots, or grassy areas for spillover peak parking during those Black Friday events. Is there any idea to include that within the banking system itself or to encourage that as a new kind of land use practice that can take into account those peak days?

**Erika Hollis**

Well, I know that the city already does have some shared parking ordinances in their—on their zoning requirements, so that is available. It hasn't been included in our program, but I know it is an option that they're trying to encourage in different areas. There also are some, as you just said, some overflow parking sites that they are trying to encourage different developers to use.

So the city is very receptive and willing to look at that, and they have been really, really supportive of this whole process. So they do have shared parking on the books at this time.

**Eva Birk**

Great, that's good to hear. I guess this question is open to all of our speakers on the line now. We had some general inquiries into pushback on reducing parking in general, especially in very dense areas, and I know that we've talked kind of tangentially about having design charrettes where you can engage the public, having very nice rendering pictures of what the final product will look like, but on the ground in Little Rock and Greenville, what have been the most useful strategies to both of your groups for communicating with the public that reducing parking requirements or reducing the way an urban form will look in a downtown area will actually have these multiple benefits? Whoever wants to jump in first can go for it. It's not an easy question.

**Caran Curry**

I would say—this is Caran in Little Rock, if you can't tell from the accent. I would just like to say that I felt like that we lost the battle. Our initial designs actually cut out some parking spots on Main, and after very lengthy discussions with merchants, very—I mean, we spent a lot of time trying to reduce the numbers. I think we actually finally abdicated at this point in time on the parking, and at least for every parking spot that we retained, we did sort of reconfigure them and add in the rain gardens and the various bump outs and that sort. It was a hard battle too. It should not be underestimated.

**Erika Hollis**

From the Greenville perspective, we didn't have a lot of pushback, and I think in large part that was because we focused—we did not focus on the central business district. To a large degree, the reason that the city didn't want us to include that in the study is because there's so many businesses within that area and they vary so significantly, it would have been really difficult to determine what vehicle was—like, a person from that vehicle, what business they were there going to. So the dynamics of a parking study within a very—a central business district would be very different. Our city already has different parking standards within the central business district, so that was a large part of why that wasn't included and that we also just didn't get pushback, because what we were focusing on was more—you know, still within the urban area but outside of that central downtown.

**Eva Birk**

Got you. Yes, and it seems like you had a—I'm hearing that you had a lot of success with the program in general, and part of that might have been excluding in the initial phase the downtown area. When you're looking at more dispersed land uses and talking about, you know, we did a fly-over, we have some data showing that these sites aren't actually using all the parking that they are building, that's an easier story to tell. Does that make sense?

**Erika Hollis**

Yes.



**Eva Birk**

Okay, great. Thanks for that input. So we have just three more minutes to go here, and I guess I'll ask our illustrious panelists if there is any more closing comments you'd like to make. If not, I will go ahead and close the line for today, but I just wanted to say thank you to all of our speakers today, and Melissa here and Emily here in the control room at U.S. EPA headquarters for doing a wonderful job putting this webcast together and getting some great ideas out to our audience today and sharing some good hard work that's happened on the ground in Little Rock and in Greenville.

So does anyone else have anything to add?

**Caran Curry**

No, I'm good. Thank you.

**Ericka Hollis**

We're all set. Thanks a lot.

**Eva Birk**

So I think that about wraps it up. Again, I'd like to thank all of our speakers, and then let our audience know that they are welcome to join us for our next webcast on November 4, 2014 on Innovative Financing for Green Infrastructure. Again, slides will be available via the U.S. EPA Green Infrastructure website in about a week, and that ends our webcast for today, so thank you very much for joining us.