

TRANSCRIPT

Tele-Workshop: Interpretive Wayside Development and Design Standards

>> Good afternoon. My name is Mark Conley. I work with the America's Byways Resource Center and I represent the Forest Service of Bureau of Land Management and the other Federal Land Management agencies partnered as part of the National Scenic Byways Program. And today, I'm really delighted to introduce our guest speaker for this discussion on Interpretive Wayside Development Design Standards. We have really 2 excellent, very knowledgeable professionals and I'd like to start first with David Guiney. I'll give a brief introduction to David's background and then Betsy Ehrlich. David Guiney has over 30 years experience with the National Park Service as an interpretive media specialist. He works at the National Park Service Center for Media Services in Harpers Ferry, West Virginia. David started his career as a National Park Ranger, then became a planner of wayside exhibits. In the 1990s, he began planning museum exhibits and authored the museum exhibit's planner software used by the National Park Service and other media organizations around the country. For the last 8 years, David has been responsible for the Harpers Ferry Center's Interpretive Media Institute which provides media knowledge, standards and trainings for employees of the National Park Service and for the partners of the National Park Service. The resource center is really delighted to work in partnership with the Harpers Ferry Center. Our second speaker, Betsy Ehrlich, has over 20 years of experience mostly at the Harpers Ferry Center. She started her career in 1986 designing brochures, folders, pamphlets and posters for the Division of Publication. She later applied her design skills to indoor exhibits serving with the Division of Exhibits as a designer and design contract manager. In 1996, Betsy joined the Division of Wayside Exhibits. She is now a senior designer at Harpers Ferry Center focusing on Wayside Exhibit Development. In addition to overseeing overall wayside design and managing design and art contracts, Betsy has considerable expertise in development of wayside guidelines and in teaching wayside exhibit theory and practice. So with that, I think maybe the first question, I'll just ask David and Betsy. Maybe, if you could just get us. How would you define a wayside project?

>> I think--first of all, this is Betsy. I'll jump in. I hope that most people who are listening have had a chance to print off and take a look at some of the examples, the images that we provided. As a designer, it's easier to just point to things and talk about them and so I'm going to refer to the images and I'll try to describe them as well for those people who, who may not have had a chance to print them off at this point. But the term, wayside exhibit, in our minds and as is most often used in the Park Service refers to what we'll call a low-profile interpretive sign that captions something on the landscape, whether it's a historic building, a natural feature, something in the landscape or something that no longer exists but once was a significant place in the landscape. So, low profile interpretive wayside exhibits caption things that we can see immediately in front of us or, you know, within the distance of our view; and that's the sort of classic interpretive wayside. We also include within the term, wayside exhibits, the orientation signage that provides broader overview to a site or an area generally within walking distance and those kinds of signs tend to be upright, not low profile and they provide both interpretive orientation to a site as well as physical orientation to a site. In other words, why is it important that you're here and what can you see and do from this location. Typically, both of these signs are designed for the pedestrian, people who are out of their cars, out in the weather. And so, from that perspective, the breadth and depth of the wayside focus on that which you can see from your view or in case of an orientation sign within a short walk to the location. And so, if you look at the images that we've provided, you'll see examples of both of those. Image number one is an upright wayside called a whaling town. It's one of 2 orientation signs in New Bedford and you can see the town map on that sign. But more than just a walking map, that sign provides an orientation to what's significant about New Bedford in terms of its whaling history. And then, if you look at the images 3 and 5, those images show different examples of low profile interpretive wayside exhibits that are pointing out and focusing on a particular feature on the landscape. In the case of image 3, the explanation and interpretation is how the bridge, the Roebling Cable Bridge, is designed and functions. And in the case of image number 5--this is from

Fredricksburg, Pennsylvania and the focus is there is the home, the building off in the distance that you can see beyond the wayside and the context is the context of that structure.

>> I would just add to that--and this is David and I thank all of you for having Betsy and I here today and for the Resource Center for inviting us. One way to think of the modern wayside exhibit is it's the successor to the historic highway marker, the state's highway marker, you know, especially for historic sites. And wayside also applies to national areas, but as the technology developed that we could put high resolution images outside, including historic photographs and artwork, it really led to the ability to have basically a high-quality interpretive device that could do a lot of the things perhaps a park ranger or a guide could do but do it 24 hours a day and do it in a very graphic way instead of just having to read the text. The difference also is, normally, you read these on foot. Your having wayside exhibits encourages you to get out of the car, at least for a little short while, at least, and not to read them from the car. And actually, I think the state highway markers still have a place. It's something you can drive by, not even get out of your car and get a quick view, you go on, [INDISTINCT] but this provides a deeper level of interpretation. It's mostly graphic. If you look at any of the examples that you're seeing, you can see that the text only occupies, you know, much less than half of any of the presentation. And it is by the way, for the most part, a graphic medium. It's something that you look at. So, it's not normally a tactile or auditory experience although you can add these elements to it if you wanted to.

>> And I'd like to jump in and just add a really important point especially now when we have lots of other options for providing information and interpretation to visitors out in the field. There are, you know, Podcasts that you can load into your iPods and listen to, there are cell phones tours. There's all kinds of things that provide the content but the wayside exhibit stands apart by its graphic nature. And so, in a large format, 36 inches wide, 24 inches high, standard size of a low-profile wayside exhibit, you can take a historic image and enlarge it to a very--you know, a sign that people can really spend some time and ponder and look at and get information out of it in a way that, you know, lots of words might not do, particularly because what they're doing with this graphic is not just looking at it as a panel but looking at it as a reference to the landscape. So, the experience that we hope the visitor is going through with the low-profile interpretive wayside is that they're looking at the panel and they're glancing up at their landscape and they're looking up at the panel and they're glancing up at the landscape, and they're creating a connection between the two in their own minds as they compare and study both the landscape and the graphic image itself.

>> You can see in looking at example number 8 where you're looking at a canal, a historic canal, what remains of it in one of the towns. One of the delights is to walk by that spot and not have the wayside and be visiting the area and have really no idea. You might think there's a storm drainage ditch or something there. You have no idea of what that place was like during historical periods and we're all really blessed in that we have wonderful photographs from historic time periods that we can reproduce there. By the way, most of the images you're seeing for the low-profile exhibits show the exhibits that are about 3 feet wide by about 2 feet high and I think, Betsy, that would be the most popular size.

>> Yes.

>> I think for quite a while.

>> Yes.

>> David and Betsy, I just wanted to briefly interrupt. Shell is emailing the individuals that didn't get the handout. Hopefully, you'll be getting those soon because she just completed that. And then, the way we're going to structure those, the remaining time on the call, we actually have kind of four sections that we're going to discuss: wayside work process charts, developing a wayside team, conducting a site visit and then the wayside evaluation checklist. We'll discuss each section. We'll have a few questions. We'll allow some

time for questions that David and Betsy could answer maybe for specific projects that you're working on and--if again you didn't get any of these handouts, we will make sure after the call that whoever did not get them, that we'll send them out separately. And so, jumping in, we wanted to discuss the handouts, the wayside work process chart and I guess the question I would just like to ask is, what's suggested typical length of time for an average wayside project from the project start-up to installation, especially considering a volunteer review team like many of our byway organizations have?

>> That's an excellent question and it does vary quite dramatically. So just to give you some framework of how extreme it can be on both ends, I would say the fastest I've ever seen a project go is, from startup to installation, about three months. And that I only saw once and not seen it again. On the other end, oh, 3 and half to 4 years. But let me frame the sort of average project time frame by framing an average project which is roughly, let's say, 30 to 40 waysides within a given project. And what happens with very large parks, with very large projects is it's typically a huge project that's say, a hundred waysides ends up getting broken down into 30 to 40 wayside chunks, sometimes, 25. That's a more comfortable number. It seems more reasonable for people to deal with it. It allows a park to kind of focus on one type of wayside. In other words, they might do all their orientation in one phase and then other low profiling in another phase. But we're talking about really big projects there so let's take a 30 to 40 wayside project and I'll walk through the wayside development process quickly and give you an idea what each of those phases takes. Project startup, this is before you have your site visit and you're just gathering your materials and getting your team together, putting together some of the references and the images that you think might be used. It's let's say about a month. To do a site visit, once you've had all that work prepared, site visits are fairly quick, intense periods of time that may just be a week long. If it's a really, you know, a lengthy site, if you're talking about, you know, a great long trail, then perhaps more than a week but generally about a week. Then, it will take about two months to put a project proposal together. That's a detailed list of every sign, its material, its, the panel type, the subject and focus of each wayside, two months to put that together and to identify potential graphics that are going to be needed. Then, we'll say about 4 to 6 months to draft a concept plan, and that is a beginning after each of the layouts in its actual size and with some preliminary graphics, draft texts. And this is where projects either really stretch out or can be quite compressed because it's in this drafting planning stage that we identify whether our new art, new maps or challenging graphics are going to be needed and art in that [INDISTINCT] can certainly extend a project by 6 months to a year or more. But without that, we'll say the phase can be about 4 to 6 months. If you're working with a small museum that needs, you know, has some of your critical graphics and it takes them awhile to get those materials to you, that can certainly extend that period of time by several months. And then the final plan, once you have all your final graphics, final texts, everything's high resolution and you're finishing that up for final review, another 3 to 4 months to get that completed. And then slipping over to the other side of that process chart is the production process and that's roughly about a 4 month total time period from having the finished files ready to go to the fabricator and doing your final review, that may take a couple of weeks. Fabrication can take 3 months or so. Within the context of our work, we have a procurement process that adds a month or so depending on the time of the year and the type of funds that we're working with. In terms of site prep and installation, site preparation can certainly be going on at a site well before the wayside bases and panels arrive so I haven't really counted that in to the time frame, that's sort of overlapping work but installation, you know, it will take perhaps a week for an average project, 30, 30 waysides to get installed. So, total time, I think when I did the outline, it's about 18 months. But again, that can be compressed if you have a lot of your graphics and you have a lot of art. But Mark asked if you have a volunteer review team that meets once a month, that could potentially really extend your project time out by quite a bit.

>> When I was working on waysides back in the '80s, we used to say a year to plan and a year to produce, and this was based, consisted of raw figures and this was based on the idea of people who are doing the job are doing other projects at the same time and they are trying to balance it with another workload.

>> David and Betsy, what are the exhibit development processes that are often forgotten about or underappreciated that create the most problems if neglected, do you have any thoughts on that?

>> Well, I think, personally, in the experiences that I've had that had sort of gone badly or have, you know, had issues along the way is when the visitor's experience has been sort of forgotten about and the work has gone on too much sort of in conference rooms and on drawing tables without good reference to the site. And so that's sort of the hidden reality of wayside exhibits is that site visit, that initial understanding of the site and the context of the visitor is he's going to be using this. If that doesn't translate all the way down through everybody on the team, you can have all kinds of hidden problems creep up. People will tend to look at the panel in their review and not necessarily understand its context and start adding. You know, that's like a common thing to see. You know, a reviewer that wasn't in on the beginning and hasn't been to the site will want to see materials added, text added, images added. And so having your entire team, at some point along the way, either on the site or providing them some vicarious opportunities to get a sense of the site through site photos, descriptions of the site and reference back to what's decided not to do when you were out on the site is really important. And that's, to me, what sets waysides apart from all the other media is that connection to the site that you can't really evaluate a wayside unless you're looking at it out there and visitor is on the site.

>> I have a couple of points on this one, things that perhaps sometimes get overlooked in. The people that work on wayside exhibits who have their primary work here are very aware of this point and that is the strength of the wayside exhibit, the interpretive wayside exhibit is to be directly related to something the visitor sees. So, the visitor's experience is, say, in the example in number 8 where they're looking at the old canal prison there is they're really looking at the historic sites. They're soaking in a sense of place. They're realizing that they are standing where something very significant happened over a period of years and we're connecting them to the outside. We're connecting them to the reality. In a way, that doesn't happen today in a museum in a city where they're a little bit divorced from the place. So, the experience is the wayside is helping you to appreciate the place but we can't let the wayside itself become the primary destination and the primary experience. We're sort of acting with our wayside exhibit as the catalyst to help them appreciate the reality of the area that they're looking at. Another thing that's not always considered is what kind of writing is needed in a wayside exhibit and often, information can be compiled by subject matter experts, but they might not always be the best person to draft the wayside exhibit text or edit the final text, because very few words can appear on that panel without, you know, loading it up with too much text. So, it takes a little experience and the right kind of a writer to be able to do the final text for a wayside. One other thing I'll throw out that many times people do not come with a grain of understanding of your areas as you all have yourself of your individual byway areas. So, there may be some terms or some pronunciations or something that everybody knows what that is, you know, like you refer to say the River Walk and you think everyone knows what that is and they may not know what it is, and so you're always trying to put yourself in the visitor's shoes and, "How can I make it clear that what I'm presenting is available to them and it's not a term that they wouldn't understand?" So, and that's where it always helps to show it to a few potential visitors or somebody came in from out of town so they can point out some of these things that might trip up the visitor from the outside.

>> Editing, I'll say one of the things to emphasize, the importance of finding the right graphics. Yeah, you may be out on site and decide that there's a great location and there's a great, you know, feature on the landscape but you don't have one or two things. If the visitor can't get there or it's an awkward place to get to or it doesn't seem like a comfortable stopping point, you're going to reduce the number of visitors who are going to actually use it. Not everybody wants to go to a wayside just because it's there and so the physical surroundings are really important. The landscape design is really important. Sometimes, we have to enhance the landscape a little bit just to make it feel like a nice place to stop for a moment. People spend about 30 to 45 seconds at a wayside. It's really not very long and so you need to be able to reach them quickly and let them get on with their visit. The other thing that we sometimes find along the way when

you're in the middle of a project, if you don't have a good memory back to that site, you might get lost in it, the graphic that you're looking at. It's easy to get sort of caught up in lots of interesting stories and lots of great graphics but if that graphic doesn't match well or work well on the landscape or you just can't find something that's going to work well, we sort of recommend not doing anything. It's better to do, you know, one less wayside to make sure that those that you do put out in the landscape are really powerful and really strong. The last thing you want to do is have some that are sort of weak and not really worth your time stopping it. At which point, people then sort of turn off to the whole medium and then you lose them entirely.

>> Well, you're branding your byway. You know, for the byways in particular, the wayside exhibit is telling people there's something significant here to see and it might also bear the name of your byway. And so, you know, if they see one and it really does have some value in it, then possibly, they'll look at the others but I think it is an important function of the wayside exhibit in addition to a sign program and other things, other types of media to help create in people's minds the existence of your byway in a very visible way.

>> David and Betsy, maybe before we move on in developing the wayside team, we could take a few questions if anyone has specific questions about the wayside exhibit development process or the production process.

>> Yeah, this is Mike with Volcanic Legacy Scenic Byways and I just want to--is there a recommended font style and size?

>> Well, font style is certainly going to determine, help determine the size. The Park Service has two fonts that we use and one was designed specifically for the Park Service. The other was an off-the-shelf font. But the one that we use for the text in waysides is the, is the NTS Rollinson Custom Face. Now, there are a variety of type spaces out there that you can work with. You know, having a custom space for us is useful because it was designed specifically for legibility in smaller sizes. And so, if you look at, for instance, the letter "e" within the font, it's a very open letter. It's also taller than a lot of other fonts and so we can get away with the smaller point size using that font and maintain legibility, so when you choose fonts, you have to look not just at the font itself but how legible it is at different point sizes and how much leading or spacing between lines to kind of see what your fit is going to be. We used to use, what, Century here and—

>> Century, [INDISTINCT]

>> Right.

>> Helvetica

>> We switched to the new font we found to our great delight that we were able to get more words in at a smaller font size but increase the legibility all at the same time. And in all of the cases that we sent out those panels that you're, the examples that we sent out are all using that NTS Rollinson font.

>> So, do you have a design firm that you're working with or do the byways have a set of design standards that would be used across the board for all byways wayside?

>> We do not. Mainly, it's based on the individual byway organization, yeah, who they work with but we don't have standards for waysides.

>> So then, I would recommend that if you have hired a design firm to help you develop your wayside layout that you might ask them as part of the process to try out a couple of different fonts and look at the fit and the legibility and see which font you get the best legibility with the greatest number of sort of words per line.

>> We have the great opportunity of having 2 National Park [INDISTINCT] Byways so I have access to that.

>> Great.

>> Any other questions on the development process before we move on? Okay. We'll jump in, Betsy and David, maybe briefly discussing, you know, development of a wayside team and I guess just a general question, what should one consider for production and total cost estimates? Is there any guideline? You know, oftentimes, we have some grants for our projects. So, if you have any thoughts on that.

>> Well, I can run through sort of the average cost for different elements of developing wayside exhibits starting with sort of the easiest thing to nail down in a way and that's panel and base cost. There are a lot of different choices of panel materials and so that certainly is going to affect the cost. We're working here with contractors with a set price so what, you know, we get here in the Park Service and what we'll get from the same kinds of companies out there--there are only so many that makes this kind of products. I would imagine those prices are going to be somewhat similar and those costs range from somewhere in the neighborhood of 750 to \$400 depending on the panel size and I'm not talking about the highest-end porcelain-enamel which is in the houses [INDISTINCT] but for the other more temporary or, you know, 5 to 10-year life span panel materials, 4 to 750 is about what we're paying. Bases will cost anywhere from between \$500 and \$900. They've been going up lately because metal and materials and shipping has gone up quite a lot lately, but that's about what we're paying now. Planning and designing costs under, both under contract and doing some of the work in-house ranges roughly from about a thousand five hundred to \$2,500 per panel. And then additional costs to consider are things like original art which can range from a thousand to 5,000; getting high-resolution photo scans and use rights for each and every image that you're going to use on your waysides can range from 250 to a thousand. And then maps will generally run between 500 to 2,000 depending on the level of complexity. So, if you have no idea, you know, what's going to be on your wayside or whether you're going to need art or maps, you're going to have one shot of doing an estimate and what we recommend for parks is they estimate about \$7,000 for wayside and that's a very high-end but you shouldn't go outside of that. You know, a more reasonable figure is between 3 and 4,000.

>> I'm sorry to interrupt. Would you go back, please, and give me the average base cost again?

>> It's between 500 and 900.

>> What fabricators are you finding have the best longevity and what material are you using the most?

>> Well, you know, there are a variety of materials and we work with whatever seems to be appropriate at that particular park, and in some cases, the more temporary materials are preferable because the park knows that they may be changing the information or they may be changing the location and so, you know, they're going for the 300, 400-dollar temporary material that will last them a couple of years to give them an opportunity to change it out. And so, you know, there are a variety of different material that's sort of low-end. In fact, there's a lot of companies, you know, locally in small and medium-sized towns that will output your inkjet on a vinyl, you know, and laminate it to a backing material like Divon for a price of, you know, 2 or \$300. As long as they last in your particular climate, that varies tremendously. I think most parts right now tend to be going with the high-pressure laminate material which is like our, you know, kitchen counter top Formica, Wilsonart, or that kind of thing. It seems to have a fairly decent life span. We've had some batches of it that haven't worked some well, that have faded some. And there are 3 companies that we work with that make that material and then there's a new material called a polycarbonate that is an image done on vinyl and mounted on to a polycarbonate plastic sheet front and back. It's rather new. We get

great image quality. The price is just a little bit more than a high-pressure laminate but we don't really have a lot of information yet on how long its lifespan.

>> Is that the digital [INDISTINCT] resin, is that?

>> Yes, that's the high-pressure laminate.

>> So, this resin is the high-pressure laminate?

>> Yeah, the Fossil Follia and I-Zone produce those.

>> I'd just like to throw out the idea that \$7,000 seems a little scary. It seems kind of scary to me and I work here and then when I was doing wayside planning, you know, awhile back. That would be a very high figure but something to remember about the National Park Services, we have a really long history of doing this kind of thing and refining it and trying to bring up all the quality standards and also all the policies and regulations that we have to comply with within the federal government and within the Park Service. We used to say though that to do a wayside is usually just get a board and nail it to a stick and put the stick in the ground and then staple the piece of paper and a document protector to it and have some pictures of the [INDISTINCT] Park. We could say, well, we could do a 10-dollar kind of wayside exhibit, you know, that might not last too long, but you have to remember the kind of work that we're doing--I mean I have seen wayside exhibits in the ground for 10 years, 15 years, 20 years that they're actually still out there doing a job, so when you take the cost of a high-quality exhibit with beautiful imagery and writing and artwork, maps that's doing that service for that many people for that long, perhaps not so much. But I think maybe for most of the people in the byways, no, they're not going to be all \$7,000 if there's going to be maybe three or four—

>> Right.

>> And if you have someone that can volunteer some services, they can take away from some of the costs like you have a wonderful collection of images and you don't have to pay use rights because whoever has the images will donate them to your project. There, you're saving a lot of money. So, there's lots of ways that you can, you know, get something done and we're explaining how we do it and in some cases, how we need to do it and you may be able to find some advantages that we don't have in terms of cost.

>> All right, typically what's going to get you way up into that highest end is the need to do original illustration. And again, if you really don't have any graphics, you know, you're talking about something like [INDISTINCT] Pueblo Mission. You know, there's no photograph, on historic images to go back. We need to create original artwork and that artwork has a life in it of its own well beyond the wayside exhibit and it can be used and re-used well beyond the wayside exhibit. So, when we're talking about developing materials of that sort of level of finish and cost, we're just not talking about the final product being a wayside exhibit but we're talking about a historical record. You know, that painting reflects our understanding of that culture of that period of time the moment we did the painting. And so, you know, that kind of record has a value that while it is not necessarily obvious to somebody who's looking at a budget like this, it's certainly in terms of the long term references that are accumulated by parks and historic sites. It has a value well beyond and they live well beyond the wayside exhibit itself. The same thing with maps, a lot of the maps, you know, that we do can also be repurposed in a variety of other ways and often are, so their cost may be part of the wayside project but then they end up getting used on our website and site bulletins and all kinds of other, other things.

>> Exhibits or photos 5 and 6 of the 9 that we sent, exhibits 5 and 6 show illustrations that were done probably way back before the wayside exhibit. Is that right?

>> Yeah, actually 6 was developed for another wayside at another site and we repurposed here on this one so we got to use it twice. The first part had to pay the cost. The second part got it for free.

>> The large image in photo number 7 up in Alaska, the glacial landscape, is one that Betsy took during a site visit and so, that's a pretty good, you know, a pretty good way to save a little money and not have to illustrate it. But really, you know, when we had earlier media and we didn't, could not reproduce these high-resolution images, we had to hire someone who used to do a line drawing of a landscape so we can identify the landscape features. So, there's lots of ways where you can control your cost. And at the beginning of your project, you can just say, look, we only have like \$3,000 per unit and we want to do 3 waysides. So, we're going to say that we're not going to do art; or if we're going to do art, it's going to be one piece. You know, you can just set yourself some parameters so that the scope of the project doesn't get away from you and doesn't end up causing a lot more than you had planned.

>> David and Betsy, going back to developing the wayside team, do you recommend a team of experts or interpretive specialists or can you do some of this work with volunteers?

>> Well, I think the reason we put this one white paper together in the first place is because it's really not about whether you're a volunteer or a professional or an expert, it's whether you have these skills. And what we have found in our experiences working with varieties of different parks of all sizes is that there are often hidden talents that may not be necessarily be obvious in the job description as a title but you know, if somebody's a great photographer on the side but happens to be, you know, the person who is the, you know, the interpreter on this project and so when we find out things like that, we know then that we can send that person out to take some of the photograph and save, you know, the cost of hiring somebody if they really have the skills to do the photography. So, it's easier to kind of answer that question by really just looking at each of these skill sets and then trying to figure out who really has, you know, honestly, good skills in those areas. Certainly, we've ran across folks who, you know, they have a copy of, say, InDesign, Adobe InDesign on their computer but they have never actually used it before and they want to sort of try out their hand at design and that's not somebody who I would recommend getting involved. In wayside design, the lay-out looks fairly simple but managing--the color management and the image quality and the transition from that file to a printed hand-out can be a lot more complex that you'd ever want it to be. And so, I think just a really careful assessment of who you need on your team, you know, if you don't have new illustrations, you can just crop that one right off. You don't need new maps. You can cross that one right off but some of these other skills are critical and can come from, you know, all sorts of places and don't necessarily assume that if you're paying a contractor that they necessarily have those great skills. Waysides exhibits, they are unique, funny little medium in a way. It's not like there's a lot of firms out there with wayside exhibits in their title. You just don't sign people who specialize in this and do it full-time. And so even design firms you pay a lot of money to sometimes make, you know, simple mistakes, when transitioning into this medium and trying to do, say, a book lay-out on wayside when the book lay-out really isn't appropriate.

>> We've been, I think, pretty lucky here at the Harpers Ferry Center because all the skills that are represented on this handout, the one entitled, "Developing a Wayside Exhibit Team," you know, almost, in a sense, have worked here over the years including illustrators and writers and photographers and people who can design bases and all those kinds of things. So, the question I think for you might be, "Which of these specialties do we have in our own group or with our own local community and where might we have to hire somebody either locally or hire them from somewhere else around the country?" And one thing I would suggest is I know people will say, well, I can write because I've done this paper or I've done a book or something but I would just ask for some sample of the work which to me is always the most impressive thing from someone who volunteers to do, say, lay-out design or help you would landscape architecture. Just show me some photos or some examples of things that you've done and look at it together as a team just to

make sure that before you get them started, they really do have the capability of doing the work of a quality that you would expect.

>> And if you do hire people and they're not local, you know, unless it's just simply the fabricator who's making the panels remotely and shipping it to you, anybody who's actually involved in the development of the content, the writer, the designer, they really ought to see the site and have a, get a good understanding of what that site is all about, how visitors are approaching it, what they might know before they get there. The context of the site is all very important. If you're going to get the best out of the team, and so, local is useful because visiting the site is a little bit easier but if you do hire people who are remote you know, that's when you pay for that travel to get them to really sense and concentrate at time with the full team on the site early on in the project is something that, boy, it pays off in the long run over and over again. I'm never sorry I've brought contractors out on site because we refer back to that, "Remember when we were standing there and we said this or that?" It's just a really worthwhile effort to get everybody there in the site to stand there and experience it for the first time. So, you can bring in remote people but make sure that they get familiar with the local site and the local folks.

>> Thanks. What are your thoughts for byway organizations that want or have to provide their own installation of panels or exhibit or wayside, are there any special considerations to think about?

>> This is an area that I've always been interested in and where, I think, we've seen projects really shine and where we've seen them kind of fall flat is in the proper provisioning and installation of exhibits. Because really, they could actually even detract from your site and give the wrong message if they're not installed properly. But even in most parks, the local parks, usually the maintenance crews of the park install the wayside exhibits and when it's a project we're involved in, we provide instructions, drawings, we have a video which they can look at to help them with the actual installation process. But the design of the area, the creation of some kind of hard surface pads for visitors to stand on, making the place a little bit more friendly for the visitors' experience which in some cases means, try to provide some shade, making sure that the wayside doesn't call undue attention to itself, and that is integrated into a landscape and looks like it belongs and is not distracting or causing undue attention to itself. So, if perhaps, there may be a part of your team, someone whose going to come in that would be, have good design sense, what, you know, proper landscape will look like, a landscape architect perhaps. Maybe someone from the local university or something who can help out and the Park Service, over the years, we tried to have our regional landscape architects in our seven regions come in and help us with that and have time to draw up some plans. But it really is very critical to have them properly position and my biggest pet peeve is when they go in and the legs aren't straight up and down or they're kind of a, makes the exhibit look like a [INDISTINCT] a waiter, looks like it's falling over like the Tower of Pisa or something like that. That's just sort of a little pet peeve I have. But of all these little things are signals to the quality of our program and I think, they're going to, when it's done right, it's going to bring pride to the byway and it's going to show, you know, so really, you know, done everything right and added something rather than call attention to something that is not done right.

>> You know, we recently had a, one park, you know, call and let us know that they were using eagle scouts to do the installation of their waysides. Now, they do have maintenance crew. But they didn't have enough staff at that time and it seem like a good project for the eagle scouts. And they did just fine and they provided them guidance and direction and did their installation. And I think, you know, one thing to keep in mind is, the wayside exhibit needs love and care and attention, you know. As soon as it's installed, birds sit on it, people, you know, mark them up and damage them. And, you know, panels, they have a short life if they're not cared for. They should be cleaned every year. And so, I think, the question about installation is connected to this long-term maintenance because the people who are, perhaps, installing might also be the people, hopefully local, who take some ownership and will take some responsibility and just sort of check in on it every now and then. Look at the ground around it to make sure it's not all muddy and rutted and, you know, has poor drainage or that a new pathway has been constructed by, you know, visitors just beating

their way straight to it. And so, now, you really need to upgrade the site a little bit because of visitor pattern, just to, you know, carry a wet rag and clean them off every now and then. Those kind of things are critical to the real long term success of this product and yet it's often over looked because, you know, once it's put in the ground, it sort of, the project is over and people move on. And then, they start to look shabby and you lose all that investment that you just put in the ground.

>> Mark, do you have any questions about the different types of skills that you want on your team?

>> This is Debbie, I just have one comment. I think, your point about checking out capabilities is really important because we can get carried away with the amount of verbiage on wayside exhibits and that just, does the visitor in if you just got way too much information. And I think it's important that it's the local historian that's going to give every detailed date, time, and place that's doing the writing.

>> Right, she's got 30 to 45 seconds in line then, if you can't read in that period of time and glance at the photograph, it's probably, going to lose a good number of your visitors.

>> Any other questions for David and Betsy on this topic of developing a wayside team?

>> I have a question about pre-testing it on the audience. Do you all do that normally?

>> Excellent question, we're doing more of it now that we have materials that we can use that are really inexpensive. Pre-testing or doing evaluation before a wayside is out on a site is a little challenging because, again, if it's not relating directly to the site, we get feedback about, you know, wanting more information on the wayside itself. And so, you know, in a recent case, we actually purchased portable bases for a park that they could bolt into the ground and use temporary panel material. Actually, one of these, layout number 7, the glacial landscaping at [INDISTINCT] Fjord is one of those. And the park did a one week visitor evaluation on those waysides to get some feedback knowing that what's in the panel now may not be in the panel when they purchase their final, more permanent material. And in fact, they learned enough last summer to know that they want to go back out again this summer, we're adding a few additional orientation waysides. They're going to do an even broader evaluation with more visitors to get a better picture of how the whole site works. And then, the plan is to, you know, evolve all of these waysides, there's a handful of them, maybe a dozen at the site. And nothing is done until we get this evaluation information in and can finalize the panels. So, I think it's, now panel materials being less expensive, you know, some of the cheaper materials, you get something that will last a couple of weeks or even a year depending on the location. It's a fairly inexpensive price. And, but it's out there. And so, as long as you're okay with the size of your bases and know that your permanent panel will go into the same site base, your only commitment is that base. And, financially, that the panel is sort of disposable and it's a great way to get honest, true feedback.

>> I'm going to take this opportunity to let our recording be [INDISTINCT]. So, hold on for just a moment. They're going to push the re-record button and then we can start up with the next section.

>> Can I ask a quick question?

>> Sure, go ahead.

>> How much do you budget for maintenance for say, 30 or 40 panels for a year?

>> How much for maintenance for 30 or 40 panels; that's a good question—

>> I don't know that we have that off the top of our heads. I guess, see, it depends on how long your panel materials are going to last. And some environments, they might look fine for 5 years. And others, perhaps in desert environments or there's a lot of vandalism, they may not last that long. So, it's hard to say. Then, we could give a price for how much it costs to replace, say, one of our typical panels like an inkjet embedment. It's a—

>> Right. I mean, you know, in the case of, say, you're using a \$400 high-pressure laminate panel and after 5 years, it starts to look bad or somebody gouged into it, your replacement cost is about the same. You don't have to do all that planning and design. So, the big cost there is gone. It's just the panel replacement cost. And so, it really depends on the park and the nature of vandalism in that park or the nature of the climate and whether your panels are getting, really beat up in the, you know, hot summer sun or that kind of thing. And, then, in terms of just maintaining them, if the panels aren't degrading and they just need to be cleaned, you know, it's just—

>> Volunteers can do that—

>> Right. Exactly, you don't necessarily need to spend a lot of money, you could just use volunteers for that or, you know, have that part of a local sort of maintenance, you know, if there's a local maintenance crew or, in some cases, some of our partners are, you know, cities and towns like this, New Bedford example, the city installed all the waysides and they help to maintain them so they have their crew that goes out and, you know, does the regular maintenance and that's just part of the schedule.

>> What do you think, Betsy, maybe in an area, a typical kind of an area, not the best condition, not the worst conditions that the site might expect to replace their panels every 5 years. If your information is still good, then you don't have to go back and pay for planning and design. And if some of your information has changed, if you've archived your file, you may be able to retrieve your file and correct some text or put in the new image or change the map without having to pay the full cost of generating a whole, the whole thing over again.

>> Right. The archives files are what you're really spending all your money on for that initial first wayside. And then, after that, you know, the panels are essentially disposable every 2 to 5 to 10 years depending on the circumstances. So, I would certainly have a regular chunk of money available to replace. And if you don't think that the maintenance money is going to be there on an annual basis then you might consider, if your project for instance, you're getting money once and you won't get much in maintenance down the road, you might consider a much more permanent material so that you can avoid future maintenance cost or buy back up, buy more than one panel. So that when the first one is damaged, you can quickly pull that out and put a replacement in. And that sort of comes out to the first project cost of the development of the wayside.

>> Thanks Betsy. I'm just—we'll briefly go in to conducting a site visit and I know you've already touched on this a few times, but, again, I heard you say how important is this and maybe you could just give us a little more perspective, your views on the site visit itself.

>> I have a little preliminary comment before Betsy gets into this, but, since she's doing this all the time, she'll have a good perspective on it. But, at the Harpers Ferry Center, we're normally going out from the local area to different parts of the country to do our work and we think of this, for us, as a visit or a trip and maybe in your cases, you know, this is something that's very close to where you live and it's not so much a trip or a visit as it is, maybe, for those you bring in from the outside to work on, it's a trip for them. But the idea here is not so much, how far you go to get to there but it's where the whole team pretty much has a chance to begin their active study. I always called it a study where you're studying all the sites and the stories to work up your recommendations. And what Betsy's put together in this handout, conducting a wayside site as it is, all the things that seem to work out well and organizing this exercise so that when you

get back and start doing your writing, planning or designing, that you did everything right there when you had that opportunity to be at the site, especially if you're working for the business.

>> Sure. Well, I'll be honest, this is where the fun happens, you know, how many other jobs that you get to go outside and hang around a really spectacular place with cool stories and call it work. And so, you know, it is easy to get, sort of, caught up in the moment of just being in a really cool place. But, in, I think a lot of work needs to be done ahead of time so that you're really prepared because sometimes it rains and sometimes it's cold and sometimes the mosquitoes are biting and you still have to stand t there and discuss things and make good decisions while you're out on site. And so, to be prepared really requires some advanced thinking on the part of, hopefully, there's a team leader somewhere in the picture that really has a sense of, you know, what the great visitor experience is going to be once these waysides are in place and they can kind of champion this thing all the way through. And if they're pulling together resources that they think are going to be useful to facilitate the discussion and perhaps to also, you know, actually, be used on the wayside, it's great to have somebody with that notebook in hand that has, you know, just black and white copies and the Xerox copies in a binder that they have in hand or in the car with them. So, that when you stand on that site, the person who really knows the story and can describe for the rest of the team, why this is such a cool site and why people are going to want to stop here and think about it for awhile. They can also pull out the images and the references that help tell that story so that it's, it begins to become, again, a visual experience and not just a narration of a story but you have those graphic references in hand when you got out to begin to see the connection that's between them. And again, if you think a historic photograph is great, you're out there looking for the right place to put the wayside, you're looking at visitor pathways, you're looking at comfortable places to pause and the photograph, the direction of the view of the photograph and where that photographer stood when they took it might be an ideal place or, you know, it might be in the middle of a busy highway and you can't actually stand where the photographer stood. So, really, having those things with you so that you can evaluate them, look at them with your full team and get an understanding of why an image might be a great image but it's not going to work here. This other image might not initially seem like a great image but it works great on the site. You know, those are the kinds of things that you just sort of discover when you're out there. And you don't, you can't necessarily figure it all out if you were just sitting around the desk imagining places. So, being prepared by having all those resources or as much as can be gathered ahead time, it's really useful.

>> Betsy, one thing I'd add to that, if you would bring in a contracted planner, designer or illustrator that's new to your site, it really helps to, you know, you're paying money for them, it helps, you want their best work. So, if you could bring a couple of your best interpreters out there at that time, they might be a wonderful naturalist or they could be a historian or an archeologist, and what's going to be happening in that dynamic is, they are going to be really getting those creative people excited about the site. And I think, that excitement is going to start generating ideas and start translating into a really good wayside medium at a site. So, it's good to, you know, allow a time for that, have somebody to, you know, as Betsy said, organize and lead the group so it doesn't start getting too far astray and make sure that they have that, that they really understand the story. And many of illustrators, designers have lots of interesting subjects too. They might even bring along some subject matter knowledge of their own. For instance, a wildlife illustrator might know a lot of what you're talking about. But they really want to know your story in depth. And I think that's another reason why this site visit handout is so important, that that's really going to set the tone for everything that happens afterwards.

>> And you can start out with your list of themes and interpretive objectives that are sort of broad based themes and objectives. But, what makes those themes come to life in a wayside medium is where that theme or idea is realized by a feature in the landscape. And so, again, until you, until you stand there and you look at a feature or a specific thing on the landscape and try and bring that idea home to the average visitor sort of passing by spending their 30 to 45 seconds. Can you get it across in a quick visual way when you're standing there, and so, this analysis that you're going through is not just focused on the story but it's

focused on how visitors who happen to be out there with you are, you know, wandering and looking around and what they're stopping at. It's really useful to go out, not in uniform and we usually try and make sure that the rangers don't wear uniforms. They don't have patches on their shoulders. You sort of go out as this anonymous team so that if there are visitors out there, you can make some casual observations and not end up, sort of getting, waylaid by visitors asking lots of questions or stopping you for other reasons. So, just using that power of quiet contemplation and observation is really important when you're out there on the site and it's an enjoyable thing to do. You just kind of sit and let it all sink in and find out what you, yourself as a team member feel about the site. We are also visitors even though we may be part of the project team, we can all speak for, sort of, what is it in this landscape that speaks to me. If we're trying to get somebody to focus on its geologic features but also the site is a common, you know, elk-habitat area, and people are more focused on the elk, it's going to be a real hard place to talk about geology, when all they want to do is watch the elk. So—

>> Well, it's hard to talk about geology any time, with or without the elk. I'd like to emphasize what the camera could do on your site study. And for one thing, you could bring the site back to you in your office, that's your computer. Either print it out or bring it up on the screen and really get all the details back into your head. And if you do a preliminary document back to that wayside development process, a project proposal, it really helps to have that photograph of where the wayside will be. And I think, Betsy, in some cases, we carry like a panel or even just a piece of paper along to show how the wayside will be oriented. So, that you understand as a group where everything is supposed to go and you can also show any of your potential donors or stakeholders, you know, what you're intending to do.

>> And sometimes, we're even, when we know that there are reviewers or stakeholders that are going to be involved in the project, but can't attend the site visit, we'll not only, we'll take a site photo with the intent of photo shopping in the wayside and the wayside lay out for their review. So they're not just looking at a layout in their review. They're looking at the site and the wayside and looking at them in context. Out of context, you'll get different comments back from people who haven't actually been to the site. One of the things that you'll want to look at when you're out on site too is, just the general conditions of the area and whether or not, you know, this is where you could begin to make panel materials decisions. You know, in some places, there's great security, there's low vandalism and porcelain is a wonderful medium for some types of wayside exhibits, particularly black and white historic images reproduce beautifully in porcelain. It doesn't get any better than that. But if, you know, as you're going to your site area and there are bullet holes in the stop signs and, you know, beer cans in the overlook, then, you probably want to go with the real inexpensive material and have some back up panels ready to go. So those are the kind of notes and critical decisions that get made while you're standing out on site in there.

>> As we go through this, you know, we're not meeting all the documents for you. We wanted to use the documents just as a way of organizing a discussion. But, hopefully, you have these or we'll be getting these and you can read some of the details later but we were hoping just to be able to answer any questions, you know, you might have about this while we're having a discussion.

>> And there's one other thing, I'd like to highlight on this handout and that is preparing thumbnails. We've actually had contractors say, "Oh, I don't sketch in pencil anymore, that's so old school." But, you know, we do all our layouts in digital formats ultimately. But there is nothing better than somebody with a pencil and a piece of paper while you're standing out on site sketching their idea. You get a visual medium and it doesn't have to be the designer doing the sketch. Anybody can pick up a pencil and sketch out their thoughts so that the rest of the team understands as best as possible what their ideas and thoughts are. And so I really, strongly recommend sketching early on, carrying pencils, doing roughs, having those ideas scribbled out. It's cheap. It's easy. It's quick and it's saved us a number of occasions when the team, you know, down the road changes, people sort of drifted away from the project for whatever reason, the park staff changes. We can go back to that little sketch and say, "This is the one that we circled. This is the one that dated. This is

the one that we put the star next to and it has a little annotation that shows that we intended to use this particular graphic large and this is how it's going to be used." And, you know, it's just so valuable. So, I really recommend that as well as the type of photos that Dave has already mentioned.

>> David and Betsy, we have about 15 minutes left, and I thought maybe we could briefly touch base on that evaluation checklist, I thought that was extremely helpful as well as all the handouts that you provided for this call. So, we appreciate that. And then, just a general question, are there any typical accessibility considerations for exhibits or waysides or suggestions on where someone should get help to get guidance on that?

>> You know, there are a number of different resources. We at Harpers Ferry just updated a broad accessibility guidelines document which can be downloaded from our website and that includes guidelines for a variety of different kinds of media including wayside exhibits that's based on ADA and other official guidelines. And so you got wheel chair access issues. And so if you go to ADA guidelines, you'll get some guidance just from physical mobility, for physical mobility perspective. The wayside bases that we work with are designed so that a person in a wheel chair can get their feet underneath the wayside and kind of roll right up to it, and it's also a good height for children but it's a wheel chair-accessible base. So, and in terms of landscape issues, and as David was mentioning, trail hardening. There are a variety of different specifications that you can go to for that kind of, those kinds of accessibility guidelines. In terms of actual panel guidelines for accessibility, we pulled a lot of good reference off of the site of environmental graphic design guidelines and incorporated those into our wayside graphic standards. And those are on our website and can be downloaded. And they speak to really the low vision visitor. So, we're looking at, in a wayside type of graphic standards a list of expectability guidelines that cover not just point size and line light and type of fonts but also clear logical hierarchical organization of elements for low vision and learning impaired visitors to be able to follow certain of logical flow. And so, and there are also samples that we sent you, you're seeing layouts with primarily one big graphic element, maybe a small graphic element that's an inset, some major text and a couple of small captions. But that simple, clear organization is not just a design style but it's really an approach to maximize accessibility for low vision as well as learning style issues. In terms of the blind visitor who--we're not talking low vision anymore but somebody who really can't see the panel, we're moving in to audio descriptions and tactile wayside panels. These kinds of things are sort of exceptions. They're not the rule at this point but we're doing more of it particularly with the technology, you know, Podcast and audio files being so easy to kind of distribute now, and visitors having their own audio players. You know, that's becoming more common. So, we're now able to do more audio description or for the blind visitor and we're exploring tactile wayside exhibits although they are extremely expensive. So, those guidelines that I mentioned deal with the wheelchair, physical access, and low vision access and you can find those guidelines on our website.

>> I think it's--we have come to a point with our media technology that we can do more with tactile things in a wayside exhibit situations, and one example I could give is one of our parks in San Diego interpreting a light house. And that's a kind of a light house that's sort of a cottage with a lantern up on the peak of the roof. And the park had, I think, it's basically a bronze model, a little bit bigger than say a train model house beside the wayside so that you can feel the shape of that light house. And I believe there's actually an assistant keeper's house next to that so that the shape of the whole complex, the lighthouse and the structures that are around it, you can feel. And I'm going to say, something like the house might be a foot wide by a foot tall. It's a nice thing just to bring your interpretation into 3 dimensions for people whether, even if they can see it. It's nice to touch something. And I think what we're really talking about here is universal design and trying to use as many as the senses as we can. A lot of our waysides are made in such a way with the backing panel that you could mount a tactile item onto it. Or you could have something beside it. So, I guess, when you're doing your site visit and you're working out your thumbnails, if you can bring up a concept that's not too expensive to be able to add a tactile item, it's something to think about.

>> David and Bet, we have about 10 minutes left and I'm wondering if we should entertain general questions about the wayside process and open it up if you have any questions on it.

>> Well, maybe we can just say as a sort of a preface on handout number 4 about the checklist that these are things over the years that we have seen our strengths or weaknesses to look at in the completed wayside. And you could also use this even at the beginning your project as you start to entertain ideas for a wayside. If we did this wayside, how would it stack up against these criteria? Some of you may have some existing wayside or interpretive signs in your areas and if you're looking say, you know, well, should we change them, should we improve them, you could use this as a tool for that. So, it's a good, good summary of different categories that help to make or break a wayside exhibit. And I think some of the really big ones are put right up there at the top that, maybe, if you haven't achieved one of those then, maybe, your exhibit is failing. One other thing I made throughout is just, when you look at your, the images that you have a wayside, at this point too, if you have any questions about anything that you saw there, either related to design or placement or other things then you could kind of bring those up.

>> Next question for David and Betsy?

>> I have a question concerning the bases. Is there a standard design that's available anywhere on your website and so forth that we could produce locally?

>> The producing locally--what's local? Where are you located?

>> We're located on the Georgia coast. I'm talking about a base that could be fabricated, you know, from local materials as opposed to the higher end work that you all are demonstrating here.

>> Well, that's something you'd have to look in to. It's--the fabricators that we have been using over the past 20 or so years aren't located in your area in particular, and we have--the Park Service now have a single-kind contractor, a requirement-contractor. In fact, partners are not able to use that style and that type of base. It's specific to the Park Service. But the vendors that we used to use are still out there making the types of bases that you're seeing in the images that we provided. But they're located in Maryland, Pennsylvania, and, I think, the other one is in the Northwest somewhere. One of the options is that I've seen used in a number of location, partner sites in the Heritage area up in New York State is the option to go with the high pressure laminate over phenyl resin panel as a structural panel. I'm not necessarily recommending this. I'm just saying, this has been an option for fairly simple base and panel structure and that is, you go with a, say, a half-inch thick phenyl resin panel, you don't need the frame and backing plate. And so, what I've seen folks do up there is to create a single or double post with a small backing plate that bolts right to the back of the panel. No frame. It's frameless. You know, the edges have to be mitered a little bit so that you won't have sharp corners. And it does increase the cost of the panel a little bit. But anything like that could be built locally.

>> I would say also, say, you have a metal fabricator in your area and you would take some of the images on the wayside that you see. And I think on the website, there's going to be some dimensions, basic dimensions there. You know, will it be possible for a local firm to be able to weld up some things out of aluminum or maybe out of stainless steel? To me, what's important is if you have an exhibit panel that is strapped, at least, well, hopefully, strapped on all four sides so that you can't take a screw driver or something and pull it off. And then, you can use, well, normally what we have done over the years is have one of the sides of the panel come off. So, you can slide it out. So, it's permanently trapped on three sides. But there's one side of it and in our traditional bases, it was the top side I think that would come off. And then, you could slide the panel out. So, you do want to have some kind of solid backing plate on the back and aluminum or steel plate or maybe it's wood. We stayed away from wood because wood tends to

change dimensions more so than metal. And sometimes it's not as reliable. But, yes, you could experiment or something, see how it works for, you know, a year or so. And if it works for you, then you can do more.

>> And I think long term maintenance again is when your lower cost base might not necessarily give you the best value for you money, I think in the Park Service, well, it sounds like we're using materials and methods that are very expensive. We're also putting things out there that last 25 years and so the life-cycle cost is very low. It's reasonable. I mean, when we talk about life-cycle panel cost, any of the materials costed out over the 25 years. And so the life-cycle cost is very low, at least reasonable. I mean, when we talk about life-cycle panel cost, any of the materials cost about over the 25 to 30 years life span is in the \$100 range. It's very inexpensive. And so you want something that's going to last if you don't have that ability to go out and fix and maintain on a regular basis.

>> We have time for maybe one more question.

>> I guess, David, I did hear you speak about vandalism and what--do you have any guidelines on that in general, or is it just a case by case basis on the different types of vandalism that can occur at a wayside?

>> Well, you can have a situation where when you're studying the site, you just decide, you can't put a wayside there because there's just not enough control and you're not going to be able to maintain anything. We will--I think we generally say that porcelain enamel is not good in this situation because it's expensive to make and when it does crack, it will begin to rust. So, anything where it's going to get an impact, either from a bullet or a rock or a hammer, whatever, I'm really coming around with something new in my thinking and Betsy and I have been working in this project in the last where we do relatively inexpensive panels on plastics that are supposed to last a long time. And then, just replace them because we're getting to the point where we can put out a pretty nice looking panel with a lot of detail on it that's pretty cheap. It's not going to last 10 years but it might last a season. And think about using that opportunity to keep updating your information and stay away from, you know, the real expenses of permanent panels. I do like metal for the bases. And in some case, I guess, Betsy weather steel or something like that would look better when it's going to get beat up a little bit.

>> Right. We have one park site that was, just had horrible vandalism. And it was a sort of depressing experience to think that we're putting something new and expensive out there and it's just going to get hammered right away. And what the park had been doing was using local folks to do the installation. And then, they themselves took such pride in their work that they made sure that everybody new not to mess with their stuff. And it worked, you know. You could see vandalism all around, but the things, they were doing some stone foundation work and railings that needed to be done. And they did this wayside installation and so far, it's not been vandalized. And I just wonder if it isn't because, you know, there's sort of a local network of folks and they might not generally have a warm and fuzzy feeling towards the Park Service, but they're not going to mess with guys that did the installation. So, you know, it's sort of, whatever it takes and having the local community in support and on your side is a big help in reducing the vandalism. And I think also, just typical vandalism, you know, recommendation is that, as soon as it appears, you clean it up and get it out of there. So, that more vandalism doesn't occur, so having those back-up panels can be really great in preventing further vandalism.

>> Well, it sounds like it's probably the end of our questions and we're right at 90 minutes. So, I really want to thank both David and Betsy for their time and for those on the line, they have graciously offered to continue to answer questions. We posted a discussion forum on byways online under visitor experiences for the teleworkshop on April 15th. And you're welcome if you have additional questions or you want to comment back and forth to each other or you'd like some more additional information, just post your question. We'll make sure that Betsy and David have a chance to look at it and they can, therefore,

continue to answer some questions for you. We also encourage you to check out Harpers Ferry website and that's at nps.gov/hfc. Is that right David? Did I get that correct?

Yes, www.nps.gov/hfc

>> Excellent. Well, thank you again everyone and thank you David and Betsy and Mark for hosting a very informative and detailed call, appreciate it.

>> Thank you.

>> Thank you very much. Bye, bye.

>> Thanks all of you for having us.