



Grant Writing 101 for Low or No Emissions Program Webinar Questions and Answers

April 19, 2018

- Robin Phillips: If you're writing the writing that first or even your second or third lower known mission grant application, first we'll have Cara Marcus run through how to use the webinar, go to our webinar systems and then this is Robin Phillips, the executive director of National RTAP and I will get us going on the presentation. Thanks, Cara.
- Cara Marcus: Thanks. Next screen, please.
- Robin Phillips: See if I can use this. There we go.
- Cara Marcus: Okay. Some easy housekeeping. This slide's about what to do if you're new to GoToWebinar, but a control screen on the right will show you everything that you need to know while you're in this webinar. You can open and close your control panel if you don't need to see it, by clicking on the orange arrow on the drop tab. You can move the control panel anywhere on your screen by clicking and dragging. Next slide. You can do the presentation in full screen mode by clicking the blue screen icon in the grab tab.
- Cara Marcus: There are a number of audio options. Under Audio, pull up the microphone and speakers if you would like to use your computer for the audio portion, or you can select the telephone and you will see the phone number, access code, and your personal pin. This is the recommended way to use the audio during this webinar. If you have trouble hearing a speaker, please let us know during the check box. It's one of the lower boxes. You can submit questions during this webinar anytime via chat. The questions chat box in the control panel. Type in your question in the white box and click send. We will answer your questions in the order they are received at the end of the webinar after the presenters have finished their presentation.
- Cara Marcus: You can also ask your questions via phone by using the mic and speakers. You can click on the raised hand icon in the grab tab and this will be again after the speakers have finished their presentation and we will unmute you when it is your turn and remote you when you are done.
- Cara Marcus: For the webinar slides and recording, you will see handouts. There are three handouts. You can download the presentation slides from this webinar via the handouts in the control

panel. We have slides for the webinar that we're doing. Also extra slides for general grant writing and a PDF of a technical brief National RTAP has prepared on grant writing. We will also be able to give you transcripts upon request after the webinar. We will also make the slides available on our website, NationalRTAP.org under the webinars button.

Cara Marcus: So that's it for housekeeping and now we're ready to start the webinar.

Robin Phillips: Yay, thanks. Also for you that have just joined and are on the phone, we have three handouts for this presentation. One is a set of slides that we're going to go through today. One is a grant writing tip that are general grant writing tips that came from our Grant Writing 101 that are just good reminder list of things to do when you write any grant and then we have some slides that go with that presentation and we have the follow along and to provide some information about just regular grant writing that's the other piece. And now, we're going to start the main presentation and we'll introduce the people who are going to be working with us today and please think of your questions. These are the people that have gone through it and can give you information, right here.

Robin Phillips: Jason Miller is the Senior Transportation Planner with LSC Transportation Consultant and he's the former executive director of Mountain Rides in Ketchum, Idaho.

Robin Phillips: Keith Moody is the General Manager of CATBUS in the City of Clemson, South Carolina and he has been doing this for a while and it's interesting to see a city system setting up like this.

Robin Phillips: And then Blake Foncesbeck is a public works director in Park City Municipal Corporation and they have a really small town that gets really big with tourists. These are all different environments where the electric business and implementation have gone, have been, they're working on them and they have different perspectives.

Robin Phillips: Also, Tara Clark who runs the Low or No Emission Grant Program at FTA is on the phone with us and Elan Flippin who is the Rural Program Manager is not going to be with us today, but she is also a resource for you and someone that you can call to talk about using 5311 Funds for the Rural Program and then me.

Robin Phillips: I am the Executive Director of National RTAP and we are here to help get you the information you need, what you're trying to do with your systems, and help make it happen.

Robin Phillips: So, first I was just going to go over a couple things about writing a grant and these things all apply to this Low and No program. You want to make sure that you know what the project need is. You might also be looking for other partners who are willing to come up to the table and help you purchase these budgets because they are really expensive. Then, when you're doing this, look at the dates and times and what is going to be needed, gather all the pieces of information you're going to need and the people who you might want to support your grant application. Are there people, we're going to talk about this as we do the webinar, but are there people that could help you and are there people that could stop you?

Robin Phillips: So it's important to make sure you make those contacts now. We're going to talk a little bit about the Narrative work grant and we're going through the grant writing tips now, but the thing is when you're doing it, you can just run through that and do it once and then do it

again. And as all the FTA people I know have said, when you are doing that, it really makes a difference and they appreciate it.

Robin Phillips: So, Tara, want to talk to us about what the Low or No Emissions Program is?

Tara Clark: Sure do. Hi Robin, how are you?

Robin Phillips: Good, good. Thanks for joining us.

Tara Clark: Absolutely. And thank you all for attending and you know if I may, Robin, I would like to thank you guys, Robin and National RTAP as well as our speakers that are on the line with us. Thank you so much for working together to put this on, this webinar on. I'm very excited because I believe this is something that's going to be very, very helpful, especially since the notice of funding opportunity for 2018 will be coming out very, very, very shortly.

Tara Clark: All right, so, in terms of the program, the Fast Act authorized the Low or No Emissions program which is point 48 USC Section 5339(c) in fiscal year 2016. The program is authorized for five years. 2016 was the first year and it was authorized through 2020. Fifty-five million dollars has been allocated for each year, however, for this year, Congress made available an additional 29.45 million under the fiscal year 18 omnibus spending bill. So for this fiscal year 2018, we have a total of 84.45 million dollars available for this program, so we're very, very excited about the additional funding. Thank you, Congress.

Tara Clark: This program provides funding specifically for the purchase or lease of low or no emission buses and supporting infrastructure such as facilities and equipment and I believe on the slide, it kinda gives an idea of what is considered low or no emissions technology, electric, hydrogen fuel cells, so forth and so on. So what does the program cover? What is an eligible project? Eligible projects include purchase or lease of low or no emission type vehicle; construction, renovation, acquisition of supporting facilities such as maintenance facilities; purchase of supporting equipment that is necessary to operate or maintain the low or no emission vehicles.

Robin Phillips: So, now, thanks Tara and we have our guest speakers who have this experience and why don't we have, why don't we start off with Blake and Blake, you want to talk about what your first step was?

Blake Fonnesbeck: So our first step as we looked at the electric business technology was to see where first, would it fit in our community? We're a rather hilly community, we have cold temperatures and so there was a few myths out there and things that we weren't sure about. And so, first step was to really see if it would fit in our community and we started to find some opportunities where it might fit in our community so then we had to do a little research and make sure that you know if it will fit in your community, where will it fit? What you know, what route would it fit on, how would you use it? All those kinds of things.

Blake Fonnesbeck: So that was probably our very first step was to see in the sense that would it be replacing a diesel bus? Would it be a new route that was specifically designed for the electrics? And so those are some things that we had to look at.

Robin Phillips: Keith, you want to talk about your program?

Keith Moody: Yes, thank you, Robin. We did the same thing. For our first test, we needed to identify an area that we could put the electric buses in because we have a challenging terrain and we were going another step beyond just having what we call a parade bus. We wanted to have an all in, so we took through partnership with the city of Seneca, we took that entire city and made it 100% zero emission, battery electric buses. So we had to do a lot of testing to see if any of that worked. We had the University of Texas come in to research some of it, make sure that the energy storage, all the, that we could be able to go further with this. But that was our first steps.

Robin Phillips: Cool. And Jason.

Jason Miller: Yes, I think you know for us it was at Mountain Rides, it's really started with the dialogue with the community and elected officials that many, well, several, you know city councilors and mayors were coming up to us and saying look, are there alternatives to diesel vehicles and you know if so, what were we doing as an agency to research and look into those. So there was some community dialogue happening, going back a few years and certainly community political will to see a move to cleaner vehicle propulsion and technology.

Jason Miller: So that was part of it and then it really, that led at the agency level, the first step was really putting it into an update into a five year strategic plan and a path to get about a third of the fleet to battery electric within five years, so that was the first step and then that led to a lot of the other aspects that have been talked about on the technical side that Keith and Blake mentioned on just route profiles and how they might operate.

Robin Phillips: So, all of you have been successful with this and one of things that is really different about this grant than like a regular 5339 grant is you find a manufacturing partner. So would you guys like to talk about, how did you find your manufacturing partner and who?

Robin Phillips: We can just go in the same order.

Blake Fannesbeck: Oh okay, sorry, this is Blake then with Park City. So basically what we did was again, we had pressure from our city councils like others have mentioned to move forward with something electric and so as we researched and looked, I had basically decided what we needed and then I started looking at who could provide that and we were able to find that Protera was able to match what we needed at the time and so with that, we said okay. You say you can do it, but come up and prove it so we set up a demonstrate where they came and went on our steepest hills, ran around on the route that we had established. We'd established a route right through the center of town, through the center of our area that would become an express route and so we needed something that could run all day long, sometimes 22 hours a day.

Blake Fannesbeck: And for electric, that was something somewhat a little bit unheard of. There were a few people that were moving that direction, so we found our partner and then we worked with them. They actually helped with the actually making sure that we could meet all of the needs that we had so we could run it just like a diesel bus in the sense of all day long and not having to take it back to the shop to charge and that. And so that was some of our criteria in setting up and finding that partner, but it was really doing a bunch of research and seeing who could really provide what we needed and who even had a shot at providing what we needed so that we could go from there.

Robin Phillips:

Cool. Keith?

Keith Moody:

Okay. With here in South Carolina, when we started to put this all together, that was back in 2012 when we started the partnership, putting everything together with Seneca, FTA, SCDOT. We also brought in a partner to help us, met with the Center for Transportation and the Environment, CTE, to help us walk through this. At the time in 2012, Protera was the only manufacturer in the game so we were able to identify them as the only one in the contract, then that's when we started bringing in the University of Texas to start in the data collection and also CPD, which helped with all of our reporting. They were a major asset to us. I basically have told people that you can do this yourself, but it's like going to court without a lawyer, having somebody to help pull the different things together, even though Protera was the only manufacturer at the time.

Robin Phillips:

All right. And Jason?

Jason Miller:

Yes, this is Jason. Yes, I think compared to the two other panelists and their agencies, Mountain Rides was probably, or it still probably is behind in terms of the process. So at the time that we submitted the lo-no grant, we didn't identify a manufacturing partner. So we opted not to do that so we could have more time to kind of get a sense of where the industry was going, you know, we just applied in the most recent round of funding and you know that was only about eight months ago. So the, at that time and still now, the industry and manufacturers are quickly adopting, changing, and developing more changes for electric buses, so Mountain Rides was taking more of a wait and see approach there.

Robin Phillips:

So, Keith talked about CTE and there's another on the West Coast, it's called Cal Start. Tara, do you want to talk a little bit about what those programs are? Can you explain them? They're something else that we don't really think about when we're doing regular grants.

Tara Clark:

Yes, so Cal Start and CTE are actually two nonprofit organizations and their sole purpose is to work within the industry and work with fringe industries who are interested in transitioning to primarily zero emission vehicles. So Cal Start is on the West Coast, California and CTE is based in Atlanta. They have property, they have clients, they work with properties all over the country and I know specifically CTE has actually done some work for FTA. They have been a grantee in the past. Very excellent organizations. Last year they were gracious enough to put on a couple of webinars for us, which are posted on the Low No page on the FTA website, but if you can get a consultant, if that's, I know it's tough with budgets these days, but they, the two of those nonprofits are definitely, I would say, the best because they are very first in the technology and they are very aware of the manufacturers and all of the intricacies that go along with zero emission buses.

Robin Phillips:

That's great. Keith-

Keith Moody:

That was how we determined on our first round. We since have been awarded to give more electric buses and we did its selection through an RFI and we had the different business manufacturers this time put a bus at our location to test before we opened the RFP. Just wanted to add that piece.

Robin Phillips:

Yes, and I think that you know each of your situations, you started in the process at different points in time and then approached it slightly differently for each of you and it has you

know, it's had different types of success. I think they all have been successful, but it's just different things are going on with this program. So, I'm looking on this-

Jason Miller: Just wanted to mention that you know in addition to some of those natural resources that have been mentioned, often times there's good partnership opportunities with smaller, local organizations. We found that for Mountain Rides, there was a local resilience institute, nonprofit working on you know on the ground kind of initiatives related to energy and the environment and they were doing an electric vehicle promotion on just you know regular passenger vehicles for people to get a discount if they were wanting to purchase an EV vehicle for themselves and so they had some resources and provided some technical support to the project, or to the application.

Robin Phillips: Yes, that's a great example because this is oftentimes a partnership with the communities, the state, and even regional or local environmental programs and you and they may not even, they may be thinking about your electric bus before you are and are really excited about bringing electric vehicles into the community. So, the thing that, another part of this program that's different is that there's a supplemental application and so the rest of the webinar, we really are walking through how to, how you would fill it out and the people who are on this webinar have done it and they've done it right, so their understanding about this is really helpful, so it's a description of services. You know with your, you have the Clinton system. [Hal Hewitt 00:24:29] initially defined it as the City of Seneca, but now, how would you, how are you going to define your next round, Keith?

Keith Moody: Well, yes we did. We started by taking the City of Seneca and made it 100%, it was nobody at the time had ever taken a city and went 100% so we stepped out on a limb, did that. We've been successful for going on four years. With that system, it's not been tainted with any diesel. We're seeing that just in the maintenance costs alone, we're saving about a dollar per mile. So with that success, we are coming across the lake to the other cities. We serve three counties, four cities, five universities. Excuse me, five cities and four universities. Got that backwards, sorry.

Keith Moody: So we're going into the other cities that we serve, but this is the Seneca model is set up on the quick charts system, which said that we'd have about 30 miles to run and then you have to charge. That would be about once every hour. Our drives have gotten very efficient with them. We'll get more than that out of them, but with our Clinton area, we have to have the long-range buses that we can go 20 hours a day, seven days a week and that's going to require a different type of bus. We can't use the quick charges, we have to have the long range. So that's getting ready to hit the streets in August or September of this year. That will be a little over half of our fleet will be electric then.

Robin Phillips: And so that, I mean that's one of the things that is important is to understand the area that it's going to happen in. I was thinking that it was Blake who, no, it was Jason who they, when they put in their application that they were going to do this, they wanted to do the system, but then they had only received half of the grant money they asked for and so they had to downsize it for their project. But, I think it's important to do you know to let people sort of know the breadth of what you do and who you're serving.

Blake Foncesbeck: This is Blake. I was just going to say, so ours actually, we originally asked for six buses and it was going to be around a little over six million dollars and we received 3.9 million and so we actually before we had applied to the grant, we figured out a way to lease the batteries, which reduced the costs and so we were still able to even before we submitted the grant, so that's

something that people should keep in mind is what's your contingency plan when you're given only half or something of what you've been asking for and how would you adjust to that? So we were able to still get the six buses, but then we leased the batteries in a different form and so that saved us and we were able to implement the full project that we asked for.

Robin Phillips: Right. That's great. So, after you, like say you're buying your x-buses for this community, what Tara had talked about and what the FTA said they were looking for is when you're giving this project executive summary, what, how does this project itself fit into your plan? And you've heard from the panelists that they had community interest and was putting this service in from a 30,000-foot level with part of refining the community demand and needs in the community. So, it's not, you don't have to be in great detail, but you know this is, the transit system, moving, [inaudible 00:29:06] it's a way of saying how this fits into the existing world that you have and when you're making that project up, you want to be looking at not just the vehicle, but the how are you going to charge it, how are you going to maintain it? What type of charging do you need for the route that you want to turn into electric?

Robin Phillips: You've heard the panelists talk about well, I had a fast charging and I had long distance that we have different buses and different types of charging for different service design. And so, it's just something to keep in mind as you're looking at well, what am I asking for? How much is it going to cost me? And I know that the manufacturers are really going to help you, they want you to be successful too. So, if you, on this one, you just check the box to say what type of power you're going to be using, but keep in mind all the other pieces.

Robin Phillips: People that are eligible for this need to, direct recipients can apply and sub-grantees in partnership with a direct recipient can apply. So if you're an MPO and there's a transit, you can apply through the MPO to get your money. If you're a 5311 recipient and you are wanting to go into electrical world, then talk to your state operator or your state program and they will work with you to do that. Also, if you can do that if you're a transit agency or a tribe. Tribes, if they're a direct recipient in the 5311(c) program, they are also eligible to do these applications on their own. They can directly receive the money.

Robin Phillips: So it's just something to be aware of for smaller, rural systems that you need to have that MPO or that direct recipient partner to make this work. So, when we were talking about earlier, the partnerships for implementing these grants are really important and you have to have that state partner, but you've heard us talk about CTE and Cal Start, those can be facilitating this initial implementation and helping you keep your timelines and your process to a schedule, so you understand what's happening and then you have your community and it sounds like for in a lot of these instances, the community is saying hey, can we do more environmentally friendly buses? Can't we I mean and even if your community is saying hey, can't we reduce maintenance costs and fuel costs? These are all pieces of that you want to bring together for the application.

Robin Phillips: So, do each of you guys want to talk a little bit about how the partnerships kind of work for your grant application, who you brought in and sort of what you did with those partnerships? I think one of you guys had a power company that was a partner.

Blake Fonesbeck: This is Blake from Park City. As we were putting together our first project, we initially didn't necessarily have a lot of support from our power company and then we turned around and as we went into our second grant opportunity, we started to suddenly, the power company realized that everybody was switching to LEDs and they needed some power customers and they were suddenly on board. And we were able to receive enough money to cover half of

the installation costs, or half of the costs for one of our charge stations that we put in for the grant.

Blake Foncesbeck: We also received some assistance from various agencies in the state as far as letters of support and then also our bus manufacturer was part of our partnership as well.

Robin Phillips: And are you with Protera as well?

Blake Foncesbeck: Yes, we're with Protera on both of the grants that we've received.

Robin Phillips: And Jason?

Jason Miller: Yes, we had reached out. Yes, Yes. We had reached out to our utility, power utility, Idaho power and got support for the project, were able to get a support letter and generate interest and they continue to be a partner as the project moves forward. I think that was helpful to get their involvement and excitement and have that as a formal piece of support for the grant application. And lots of local support too and like I mentioned too, local nonprofit support as well that was helpful I think in you know the overall grant package.

Robin Phillips: Cool.

Keith Moody: This is Keith. We too have the power company involved. I think it's very important, like the other two properties, because I understand if I'm not mistaken that the power companies actually get fined when they don't have a leveled load, so when you go to them and you're talking about peaks during the day, but even more so when you go into the evening service of charging your buses during the off peak time that'll help levelize their load and that helps them look better. So when we started talking to them about the night time triple charging of the long range buses, we had a lot of buy in from the local power company.

Robin Phillips: Cool. Yes, those are things you don't think about, it's like all of the sudden, wait a minute, these people would have a lot of interest, so every place is different, but there are some real strengths to figure out different ways to support the process.

Robin Phillips: Okay. So, demonstration of needs. So for each of you, could you just say what was your, you know, what did you say, was it useful life or expansion? So Jason?

Jason Miller: Sure. Yes, it was really I think in the grant application that Mountain Rides put together was focused on just buses that needed to be replaced and instead of replacing them with diesel buses, replacing them with battery electric. So it was buses that definitely were at their or above their useful life and just kind of rolling in to the fleet a transition that was kind of happening anyway, an opportunity instead of replacing in 2017, 2018 a bus that's going to have a 12 year life, replacing that with just a normal diesel bus versus replacing that with you know a battery electric was powerful that you know that was a replacement that was going to happen anyway and why not make that replacement with the battery electric for all the reasons we've been talking about here.

Robin Phillips: Yes. Keith?

Keith Moody: We had similar. We had buses at their useful life, actually beyond their useful life. We wanted to have something more efficient, environmentally friendly. Being the beautiful area that

we're at, we just wanted something that's going to go beyond what the diesels are and from everything that we were studying, what the electrics were supposed to do, we thought we'd take the chance on that and they've lived up to beyond what they were supposed to. But ours was also-

Robin Phillips: That's very unusual.

Keith Moody: Yes.

Robin Phillips: That's good maintenance management too. And Blake?

Blake Fannesbeck: So we had two different projects. Our first project for six buses was an expansion project. We basically with we had a distance of 6.1 miles that was taking people a long time to traverse on a regular bus system and so we needed to put in an express lane that went right in between and it seemed like the electrics was the first, with the fast charge from Protera was the first ones that we felt could actually do this with, and so we did those six with expansion and that's been very successful. That carries almost a quarter of our ridership on this particular expansion now and then the second grant that we applied for was to replace seven diesel buses that were up for replacement and reached their useful life.

Blake Fannesbeck: So with that, we tied it together. I think that's one of the things that we did differently. We tied the grant and only asked for basically enough to cover the extra amount that it would cost us to purchase electrics and the charge systems over a diesel. So we tied it with our current grant that we had to replace those seven diesel buses and then added this grant on top to help supplement for the electrics.

Robin Phillips: Great. So, Jason, you want to talk about what have been the benefits?

Jason Miller: Yes, I mean, I think everything that you've got on this slide is true and we've hit on some of these aspects already, but for the community that Mountain Rides operates in that relies a lot, like Park City, a lot on tourism and is a pretty, narrow mountain valley. You know air quality, even though it's not an entertainment area, air quality's a big deal and noise is a big deal in terms of just you know impacting the quality of life and the overall experience there I think was a big thing. What we saw and heard there as we went through this application process was also that through some survey work that we did that you know there were a lot of locals and visitors that were more likely to consider taking the bus if it were electric, just kind of based on a little bit of cache I guess and just attractiveness that a diesel bus doesn't always get you. So, you know, that's just something else I'd add, I think there's definitely some ridership benefits and awareness of you know battery electric vehicles, lots of in that area, lots of Teslas and Bolts and other electric vehicles running around.

Jason Miller: So there's some awareness of the benefits and seeing an electric bus, you know, conveyed at least in the survey work, some ridership growth.

Robin Phillips: Cool. Keith?

Keith Moody: I agree with that and as we all know the millennials are, seem to be more in tact with the more of efficiencies and environmental friendly vehicles. Some of the things that we're seeing over the almost four years, just throwing out some of the numbers that we're experiencing with our fleet that's over in the city of Seneca. We're running about 3400 miles

per week, so that's about 180 times a week that we charge a bus, which eliminates 700 gallons of diesel fuel per week and per month, the electric buses have saved over 68,000 pounds of greenhouse gases. It's like we planted over 1400 trees.

Keith Moody: Now with the next round of buses, we're looking at the electric buses saving over 19.5 million pounds of carbon dioxide emissions.

Robin Phillips: Wow.

Keith Moody: And that'd be equivalent of 406,000 trees. So when you look at those numbers in dealing with people that are getting more in tune with environment friendly and then when you start looking at your operating costs and when you like I said earlier, your maintenance alone, you're saving, we're saving about a dollar per mile in just maintenance. That's something you can't ignore.

Robin Phillips: No. Not at all. Blake, do you have anything to add from your experience?

Blake Foncesbeck: Well, just again, we're saving about, we're finding if we were to run diesels on that same route, we're saving about 10,000 dollars a month that we're saving. We're putting a lot of miles on these buses, about 90,000 miles a year and so we're saving about 10,000 a month. The other side of it is we have, the route that we have goes right up through the middle of our community and the comments we get from our community is one they're so excited about the electric express. We made sure that it was very much a different looking bus than the others and you see it every ten minutes, so we have ten-minute frequency on that route.

Robin Phillips: Whoa.

Blake Foncesbeck: And they're able to see it all the time and they hear it, or they don't hear it all the time compared to the diesel buses that also run on those same roads. So everybody's saying, hey can we have electrics on our route? And everything so everybody's really excited about it. It's very quiet. But the biggest thing I think was just getting it so that people really see it. It's right there and we've had our ridership has increased by 10% over our system since we've added this.

Robin Phillips: Wow.

Blake Foncesbeck: And people basically they get on the bus and because it's electric, we put wifi and actually USB ports where they could plug in and I've watched them and they just all get on, plug in, even if it's charging for a few minutes, they don't care. They just sit on there quietly. It's quiet. It's not noisy. So they just sit on there and play on their phones and iPads and stuff.

Robin Phillips: Wow. Neat. So, how, we had I think it was Keith that was talking ...

Keith Moody: We've had people riding our buses in the community that like parents and grandparents, they'll bring their little ones on the buses just to go for a ride.

Jason Miller: Yes, that's a similar thing to what we've experienced as well is we actually had people coming up from Salt Lake to ride the electric express. So that has now become a tourist thing.

Blake Foncesbeck: That's cool.

- Robin Phillips: Keith, Jason, and Blake were going to talk a little bit about how they, what plans they got into or Yes, where they got the plan. They have to be in a plan in order to get the money, so what plans were you in? Jason, you want to go?
- Jason Miller: Sure. Happy to. Yes, so Mountain Rides is in a rural area without an MPO so you know the planning that incorporated this transition to battery electric was largely local planning, inclusion in budgeting and also in Mountain Ride's five-year transit development plan. And then in addition to that, it was coordination with the state and the state tip and just making sure that there was a placeholder there for that, but the coordination and the state was the funding applicant in Mountain Ride's case and it was just coordinated as Mountain Rides is a sub-recipient.
- Robin Phillips: Okay. Keith?
- Keith Moody: Well, we were about the same when it came to a lot of that with the plan. Not much to add on top of that, I'm sorry.
- Robin Phillips: Are you guys, you guys were not an MPO?
- Keith Moody: No. We were, that is one thing different. Thanks. We were a rural system when we started the Seneca system. Now, we've transitioned. We jumped to, since the Census and became a large urban, so now we're doing, it's a little different from the first go around. So, a little bit different plans and that's where we did the RFI instead of just going straight to the RFT.
- Robin Phillips: Blake?
- Blake Foncesbeck: And for Park City, we're also under a recipient under the state and so we actually had it in our cert range. We were right at the point when electric started getting an influence and actually being possible, we were also doing our short-range transit development plan, our five to seven-year plan. So we were able to put that in and we were able to update our state tip plan as well and make sure that we got that in there, so those are the two areas that we were involved with.
- Robin Phillips: Local financial commitment? That can be cash on hand for the project and you heard people on the panel talking earlier about how they put the existing reserve fund or money that they had set aside or were receiving for vehicle replacement and then when they did their grant application, did the marginal cost on top of that to go electric, rather than 100%. Also, I know one of the panelists, they had in the area they were planning on implementing electric, they had vehicles that hadn't reached their useful life, so they traded those vehicles out into a route or a system that was not going electric and so they didn't have to sell the diesel vehicles that they were replacing, but were kind of able to replace the diesel vehicles in their system, not necessarily on that route by basically just moving things around. And then, sometimes, there is money that their state has that will help support this, foundation grants, local in-kind assistance, like I think it was Blake that was talking about how the power company at first was not all that interested in Park City, but then realized that this was something that would be an ongoing partner for a long time. So in a sense, help them move towards an electric system and so helped pay for one of the charging stations.
- Robin Phillips: So, that's one of the things about being in a plan and also reaching out to partners is we don't know who we're going to have something that will benefit you until they know, until

that helps. Did any of you receive any assistance in implementing or the wiring or in putting together your charging stations in the cities?

Blake Foncesbeck: This is Blake from Park City. You've mentioned that, I think the biggest was from the power company and but we did on our second grant, we actually did also receive a commitment from the actual bus manufacturer to reduce the prices on it by basically a \$25,000 commitment per bus to reduce prices to help with things as well.

Robin Phillips: Great. So, that's when they know that you're committed to doing this and that they you know, you can only do so much. This is the money that you have and it really is a great advertisement as well. So how did the implementation, how did you manage the implementation strategy? So I know that Keith worked with CTE and how did that go, Keith, working with them?

Keith Moody: CTE's been a great partner in this whole project. Being able to dot the i's and cross the t's, they've done this time and time again and walked us through different areas that was kinda new to us. They are, they helped with all the reporting, was able to get the correct stuff. And also, not only reporting to FTA, but also given us the reports so we can see what we're doing, how we can make things better and then preparing us for the next steps. We're headed toward 100% electric. They're able to walk us through some of that and how to get us ready for it.

Robin Phillips: Great. Do Jason or Blake have anything to add about how you put together your project, project implementation strategy?

Blake Foncesbeck: So this is Blake from Park City. We actually were kind of our own project managers with this. We'd had a lot of experience working with federal grants and working through the process of federal projects and so we had several people on staff that were very knowledgeable and worked with that. We also worked heavily with our state agency as well, Utah Department of Transportation to help us as well. But we basically worked through a lot of those things on our own.

Blake Foncesbeck: It was a little interesting for us because we were actually expecting to implement our six buses in June of 2018 and we were told as soon as we got the grant that there was an opening for six buses at Protera because another company or another city had dropped out and that if we could hurry and order, we could get those in and get those ready a year in advance and that caused us to do a lot of scrambling. We put a lot of extra time in, so it was kind of a lot of maybe harder than what we'd planned, but we still were able to make it happen and they've been running since June of last year.

Robin Phillips: Wow. Great. Jason?

Jason Miller: Yes. I think on this one, it's I don't have a lot to add except to just say being flexible is key. I think that Mountain Rides had a strategy, we were looking at fast charging, on route charging and you know purchased the two buses and the grant award was less than requested and that combined with you know industry kind of advances and changes towards more battery capacity and overnight charging that that may be the direction from fast route, fast charging on route to overnight slow charge might be you know a project implementation change partially driven by you know changes in the industry and also just the funding received.

- Jason Miller: So just kind of flexibility and how you look at your implementation I think is important, kind of that Plan A, Plan B and maybe even Plan C as you're thinking through it.
- Robin Phillips: Okay. So, also, there's a thing where you say that you have a technical, legal, financial capacity that just means have you received federal funds and managed federal funds, are you eligible for these grant funds? So if you're a transit and you're a world transit, you need to be working with your state, so you can put this application in.
- Robin Phillips: Have you been successful in managing a project of this size? Meaning this dollar size usually. And breadth, because you're looking at infrastructure, you're looking at capital purchases and you're looking at you know will you be able to maintain these efforts? So there's you know, everyone who gets into this has to have a certain level of experience and capacity.
- Robin Phillips: Project budget, we want to make sure that you put in for the equipment, for the charging, for the maintenance and you can also put in for training your staff that are going to be doing the maintenance. While if you're in a rural area not training your staff puts you at risk, even if you're not going to have a, you know if your buses are brand new, you want to make sure that you do have people there, that understand how to work with batteries and work with battery electrical systems ability.
- Blake Foncesbeck: I just want to add with the operating training, another thing that we added to the plan was first responder training because a lot of your first responders don't know how to respond to an electric bus because we've had an accident with one of the electric buses that is, a diesel would not have been able to pull away from and if we didn't have the first responders trained, they could've, somebody could've been hurt very bad.
- Robin Phillips: That is something to really keep in mind. You don't need it until you need it and then you really need it. So that's, you don't want people to be surprised about this stuff if they're going to be involved in an emergency situation.
- Blake Foncesbeck: Right and then with your, I'll tell you, your maintenance plan has to change because your electric buses don't do the same as your diesels.
- Robin Phillips: Right. Right. Not just changing the amount of fuel, you're changing the rhythm of how you're taking care of the buses.
- Robin Phillips: So project scalability, this, we've been talking about this through the conversation, but one of the things that came up is your flexibility is important. If you're asking like Seneca, changing the system, and they give you enough to change a route, well, what would it take for you to make the initial implementation and then go back for more vehicles to complete it? Just having in mind that you know, being flexible means instead of purchasing your batteries, you're going to lease your batteries. So being, I think that this question is just to help you be aware of those things.
- Robin Phillips: Managing funds. We all love match. We wish we have more of a, it's a very important part of making these things work, but these people, I think Blake talked about it with Rocky Mountain Power where initially they helped them implement a charging station and now they are helping in other ways. Idaho Power, they're interested and that you know having them engaged, that's a relationship that can be a positive one for them and for you. So,

looking at the, just as you're looking at the question, to find what it is and make sure that it's clear, whether it's just this one off or you're developing an ongoing relationship with them.

Robin Phillips: Timeline. When you receive the funds, what happens Day One? And then, when are you done with the project? When you are in service. So, let's remember to give yourself time to work backward and create some space around the timeline. You're not trying to get it done as fast as you think you can do it. You want to have something that's accurate and as safe as it can be. Sometimes good things happen and all of the sudden you're able to make hay or make lemonade out of someone's problem and get your buses early. Yes?

Keith Moody: Yes, that's correct.

Robin Phillips: Which I think goes back to the flexible, flexible, flexible.

Robin Phillips: Congressional districts. Where would this be implemented? In one district or two districts? Has the district changed since your last application? Are you going between states? And this is not a, this is a minimum of for a good project, you could make sure that your senators know about it, that your local elected officials, your state elected officials know you're doing this because again, they want you to be successful, because your success is their success and that can open up opportunities. I know that as much as your congressman that votes on the budget and as Tara said at the beginning of this, we've got 87 million dollars to put into the program this year, which is a whole lot if you're buying non-electric buses, but for electric buses, this is great. I mean we'll be able to get a bunch more buses on the road.

Robin Phillips: So, let your elected officials know what you're doing. So, we talked about this at the end before and we said what kind of resources do people use? I've put the information from the FTA website which Tara has put together. It is fantastic. And bus manufacturers, these are the ones that are there. There's ones that are coming up too that have been working in other countries. So I would like each of you before we sign off here and we're done with our live thing, what would you do differently with your project, what did you find out that you would do now that you didn't do before?

Robin Phillips: Keith, do you want to go first?

Keith Moody: Okay. The first time around, we tried, along with CTE coaching us, I think we did a lot of the good things where we studied the areas that we wanted, they helped us oversee the building of the buses. One thing that I would stress is once you pick out your area that you want to operate and you do get the buses delivered, even though you've done all your testing, we put the buses into shadow service. They had to do 180 hours, which was enough hours for one week that the bus had to deliver without any problems, no issues and once they could do 180 hours with no interruption, then we would accept the buses. So, that's what we're doing you know with our system.

Robin Phillips: It makes sense. You don't want to basically pull the trigger before you've aimed. You want to know what, you need your liability. People rely on your services and so if you can't rely on your brand-new thing, you should not be letting people whose livelihoods depend on it rely on it.

Keith Moody: Correct, because one little hiccup with brand new technology, the media and the public will take you down. So we had to have it perfect.

Robin Phillips: Blake?

Blake Fannesbeck: A couple of things I think we would've you know since we were kind of reacting so quickly the first time and moving through with that opportunity to get the buses early, we didn't have our second charge station online at the same time and so we ran for almost six months with just one charge station and we had the fast charge buses and I think differently if I'd have known that was going to be, caused me to stay up at night so many times in my mind worrying about that one charge station going down. I would've made sure that we had both charge stations up at the same time. But we were, we crossed our fingers, I think they're permanently in that direction right now, but anyway.

Blake Fannesbeck: But we crossed our fingers and I just can't get them back, they're stuck that way. But then the other thing was, this was the first grant that we had ever just actually partnered with a company and I think I would've explained that better to our legal team, our own city legal team because they were so used to the traditional RFP method that they, it took us to get our contract signed on these buses, it took us about two months to get our legal team to understand that we actually partnered and that the lo-no grant allowed us to do that. They just didn't want to hear that and so we had to do a lot of working with them. So I think I would've brought them on board a lot sooner.

Robin Phillips: Yes that, I think that's really true when you're working with local government. You know you may have the council on board or the program staff of the DOT, but if you don't have people who are going to be managing the contract understand it, it can really throw a big rock in your milestones.

Blake Fannesbeck: Yes. We got through it, but it took about, it was two months of wasted time.

Robin Phillips: Yes. No, I've been there with other projects. It's just like oh, you make me feel like a ping pong ball.

Blake Fannesbeck: Yes.

Robin Phillips: So. Thank you. These are great. Jason, did you have any like do-overs, if I was ever going to do over, what would I do?

Jason Miller: Yes, I think it's related to what Blake was talking about, notwithstanding the problems of getting legal and contracts folks on board, I think you know going back and having a manufacturing partner has more advantages than it does downsides and I think if Mountain Rides would've had that going in, that would've resulted in probably a better time-frame you know after the fact because there's going to have to be of a traditional procurement to determine that partner.

Robin Phillips: So, do you guys online have questions and Tara do you have anything you want to add?

Tara Clark: No, I think you guys were amazing and I again, once again, I really thank you all so much. I think whenever we can have the actual agencies, the actual property folks from the properties come on and talk about their process, I think it's so much more helpful than anything that I can say, so thank you, thank you, thank you again. But other than that, look for lo-no to come out soon and if you have any questions you know about the notice, please feel free to contact me.

Cara Marcus: And there are some questions. So, we do have time for them. Thank you, Tara. I'll read the questions aloud in the order they came and then type up the answers so you can see them as they're answered. So the first question is what about smaller vehicles, would this fund SUVs, cars, mini vans, etc.?

Robin Phillips: That sounds like a Tara question.

Tara Clark: Yes, that's a Tara question. And that's something that we've been talking about, I'm not really sure and I'm still learning new information every, I'm not really sure how many small vehicles there are on the market yet. I'm not sure. But for the most part, I can speak to the last couple of years, the applications we've received have been for buses and so I think that is the intent to fund primarily buses, things for public transit. But, again, I would have to, that may be a question you may have to email me on because I think it's more than just a yes or no answer because the market is continuing to evolve and new things are happening, so for especially since we want to get the smaller agencies involved, that may be something that we may have to explore and you know over the next few years.

Cara Marcus: Okay and we'll be posting our questions and answers, so if you find out more information, Tara, we can add that to your answer.

Cara Marcus: Okay, the next question is about Ketchum. Did Ketchum obtain an award with the last process eight months ago?

Jason Miller: Yes. Yes, Mountain Rides in Ketchum received a \$500,000 award and that was lower than applied for. It was \$1.8 million application for two buses and on route charging, so the project just had to change significantly, but it basically now the approach for Mountain Rides is to use that 500,000 dollars as incremental in combination with other 5339 funds, replacement funds, that would've gone to a diesel bus. You know take a diesel bus at 400,000 and then add 250 times two to do battery electric and look towards more of a slower charge, which the infrastructure's a lot lower cost there or the overnight charging, depot charging. So that's where it is and also look to potential you know future awards to supplement that and that was the first award that Mountain Rides had received for electric.

Cara Marcus: Okay, great. Thanks, Jason. Now this is a question on fuel cell buses.

Robin Phillips: That's a Tara question. Yes, that's a Tara question.

Tara Clark: Okay, I'll take it. All right? So the question is are fuel cell buses eligible?

Robin Phillips: Well, what's going on with them, are there any you know, are people getting them? They're eligible, but where is that technology at?

Tara Clark: Yes, they're eligible for funding. There are some agencies in California, specifically I'm thinking of, I believe it's Sun Transit, they actually received an award in 2016 for a facility to support hydrogen fuel cell buses, so there are some agencies, or few agencies that are going with hydrogen fuel cells technology. And it's definitely eligible, it's zero emission. Actually, the National Fuel Cell Bus Project to something that FTA had a part in, I believe on the lo-no page, there is a video on fuel cell buses, so I think that that technology is not, I think battery electric from what I've seen is more popular, but hydrogen fuel cells definitely I'm

seeing more and more interest in it, especially in California. Definitely in California, out in the West Coast.

Cara Marcus: One more question. Not sure, this is a question from Darren, my answer above, which it looks like about Ketchum again, was partly answered with half of the request, so that was already answered, what was the award, that was the 550. And that's it for questions, unless anybody else wants to ask one now.

Robin Phillips: I think that we have completed everything and we've done it in time and I really appreciate the panelists and the good information you've provided and I am sure it's helped. We had a good turnout for this and I think it'll help Tara get better applications and it'll help all of you write their applications and get more buses because that's what we like, is more buses. So at we, Tara, do you want to talk about our, let's see, maybe I can do this. We'll have this webinar up on our website in about a week. We have appended the contact information for our panelists. National RTAP will have the reporting posted on our webinar drop down box. If you are a world transit and haven't used RTAP resources, just give us a call. We have these recordings available, also the grant writing 101 reporting is available for you to refresh your grant writing skills and we're here to help you be successful. So thank you very much and thank you so much Tara for thinking of us and I hope that this gets you all of the great proposals so you can award all of your money to these wonderful rural agencies.

Tara Clark: Thank you all. Thank you very much. Looking forward to it.

Robin Phillips: Okay. Bye bye.