EVT0009477 - Pavement Management System Pre-Bid Meeting-20231205_100008-Meeting Recording

December 5, 2023, 4:00PM 1h 17m 18s

• Kristy Rizek [KDOT] started transcription



William F. Nolen [DAPC] 0:08

My name is Bill Nolan.

I am the procurement officer for this engagement and you're single point in contact after the meeting in terms of any questions or things that you have to do with the RFP.

So let me go over quickly some of the important dates involved with the meeting. So after today's pre bid meeting, we have a deadline for the question and answer period.

ℜ Henry Canipe joined the meeting



William F. Nolen [DAPC] 0:35

So today we're planning to capture questions and respond to those officially, but also there there's a chance to enter more questions as as those come up before December 15th.

ℜ Cimini, Gabe joined the meeting



William F. Nolen [DAPC] 0:51

That deadline is December 15th at 4:00 o'clock, so I have time to capture those and get them to the team and get them posted promptly.

A Aaron Gerber joined the meeting



William F. Nolen [DAPC] 1:01

After that, we have the bid closing on January 15th at 2:00 PM so all bids to submitted must be must be sent into our office at that point. And Rick, I will go ahead and turn over to your team.



Rick Miller [KDOT] 1:22

Hey, thank you, Bill.

So what I'll do here is I'm going to introduce you to the voices you're going to hear people.

You're primarily here talking, and I'm gonna walk through very guickly.

What we intend to do here today, so you've already heard from Bill, you've heard very clearly that he is the point of contact.

So any questions and comments and concerns and complaints, whatever, send them to him and then he'll relay them on to whoever they belong to.

R. Arshadi, Amir joined the meeting



Rick Miller [KDOT] 1:51

So you I am Rick Miller.

I am the pavement management engineer for the Kansas Department of Transportation, so I'm sort of the business lead on this project and before I have doctor Manweiler introduced himself, Christie, are we recording?



Kristy Rizek [KDOT] 2:09 Yes, we are.



Rick Miller [KDOT] 2:10

OK.

Thank you.

I'm Jerry manweiler.

I'm a a data scientist and systems engineer and and been involved in this project and the development of a model that represents the existing process that at a high level and we will go over that as we get into this that so those are the three voices you are going to hear for sure.

R Erin Calcari joined the meeting



Rick Miller [KDOT] 2:38

We have other folks here at Kansas and at K Dot that you may hear in this Christie,

who's voice you heard there for just a second, works with me.

So she's another business user in the pavement management section.

Dean and Ashley are in Kate's procurement office and assisting Jerry is Mark Ummel.

So he's working his business analyst and he's also there in case we need more support with IT, project management.

So those folks may speak up at some point along the way.

So what we're going to do here is we're gonna have a couple of slides that are just kind of purpose and procedural slides.

And then I'm going to talk for a little while, mainly from the requirements from a business perspective, just kind of make sure that those are clear and add a little color to what's there.

Maybe, umm.

And then Jerry will talk about the model.

So if you're interested in looking at it that way, that he will kind of give you the the the info you need in the clues you need so that you can can use that information as well.

And then we're gonna end with open questions.

You are invited, obviously, to put questions in the chat now, or you can hold them till the end and ask them.

And I realized that a lot of times in these pre bids, vendors don't wanna ask questions because they don't want to give anything away.

But I'm going to strongly encourage you to ask here.

And the reason for that is having been through processes like this before.

What I worry about is you're gonna ask a question and it's very clear to you what you mean, but we may misunderstand it.

So if you ask it here, we'll do our best to answer it.

If we don't answer it, but it we would give you an opportunity then to follow up if you needed to based on our answer or if that brings up something else that you wanna ask about.

So I do strongly encourage you to go ahead and ask those questions. Umm.

Yeah, like I said, either in the chat as we go or at the end will open up phones and let you pass that way, right?

The moving on.

Really why we are here is that we want you to know kind of what we're asking you to

do and what we will, what we will do in this process. Uh.

And I want you to understand that really the the process on our end is going to be that we really want to know what you are proposing.

In all honesty, I'm going to look at the technical side of it.

What is it you propose to do to meet these requirements?

I'm not gonna worry about the cost to begin with, so we're going to get through that piece of it.

And I'm gonna make sure I understand what you're doing and that we're happy with that.

And then we will start worrying about the cost.

So it will end up being the, you know, the best, best value to OK about to meet these requirements.

That's what we're after. Hey.



William F. Nolen [DAPC] 5:41

OK, let's go ahead and move on to talk about the RFP details and what's required there.

So my office is is running this RFP and we also have several policies and things that need to be filled out when you submit your proposal. Umm, so post it on the website with the event.

♀ Ed Shappell (Trimble) (Guest) joined the meeting



William F. Nolen [DAPC] 6:00

Uh AB T 0009477.

That needs to be included in any subject line of emails that you send me or send in with your bid, because that'll be easy to identify.

So posted with that bid it is.

It is a document called event details.

It gives you some basic parameters of the event in terms of the date open close.

- A. Laura Miller [KDOT] joined the meeting
- ℜ Tyler Pauley joined the meeting



William F. Nolen [DAPC] 6:24

It also has some questions on that form that need to be filled out, so please read through that entire document and fill those out.

It's mostly yes.

No questions.

The second thing that's posted is the RFP document itself.

That is, that contains all of our spec and all of our instructions on how to submit an RFP.

So there will be some checklists and policy forms in that document, as well as signature sheet that needs to be filled out fully for your business.

Umm.

And then the sections in that document are very important.

So in section one that is the specific bidding instructions, those are the details of how to submit your bid.

Certain dates of things that are involved and also the ways to make your bid conform to our policies so that you have no question about whether or not it will be accepted in the in, in terms of you submitting the correct thing.

Section 2 is geared towards your proposal response.

Umm, the the different items in there that we're looking for, how you how you submit again with the event number attached to all documents and all files named with that so that we don't lose track of files.

Uh, we do have a limit on size when you send your emails in, so if you have large files, you'll need to break those up into different emails from external users.

We can't accept anything over 20 megabytes.

This statement that you can't fax or telephone a bit in is due to the fact that we are looking for an electronic proposal.

So we have documents you need to fill out spreadsheets, all of those things need to be sent in some kind of digital form.

They can be hand delivered in that form, but we did.

We really don't want paper for this proposal.

Umm.

Also contains all of the different sections that are important in terms of how you describe your business.

So all the information about your business, your qualifications, experience, umm

references that are, you know, there for business that you've done in the past, that kind of thing.

Section 3.

Is this Kansas standard terms and conditions so these these apply to the RP as well as when we get to a contract award.

The terms and conditions will be very similar there, so it's a good idea to read through those.

You have the option to list exceptions to anything in the RFP. Uh.

In a separate document, umm, just to let you know that any exceptions to terms don't get negotiated during the the RFP process.

Then Section 4 is the specifications area.

This is written by K DOT and that contains everything you need to know about how your bid should be formed and what information they're looking for, so they'll talk to that in a little bit.

They also included some appendices and and spreadsheets and for requirements they are also including the the MSR model that will be discussed here in a little bit. So in terms overall, the priority of documents, everything that you need to make a good bid is included in the RFP document and that should be considered the, the, the document of record for your submit submission and all the rules that go with that as well.

That's all I have for them.

Rick Miller [KDOT] 10:23

OK, so this is just a continuation.

This is kind of the Section 4 piece from the prior slide, but really what this is is it's the, you know the words and and general description of what we want and what kind of sandbox we play in and what are we are asking you to do as vendors.

So these specifications include a background section that describes who we are, what we do and why we are seeking a new pavement management system.

But also as business objectives section that provides what we want to need while keeping in mind our future wants and needs and ability to support the system, the business requirement section, which thanks largely to the demo Group International will be covered in more detail in additional slides about the requirements and the model. This section also gives the definition for priorities and vendor response codes. Note that we have a glossary that is available as well, and section 4.4 has a brief overview of the system interfaces that we will cover in a little bit, and then the templates that are mostly the spreadsheet that we provided for you, as well as the cost template.

Uh, while everything else that we've talked about here is is important, this to me kind of becomes the meat of the, you know, the business side of of what we are interested in, OK.

And these.

Terms are are laid out here partly because we want you to understand the layout of the spreadsheet.

It has all of these components to it and to point out that we do have requirements that some of the requirements are mandatory, some we expect some would be Nice. OK, so you can look at those and get some idea of how important they are to us or how how high in the requirements they they fit for us.

And then you are asked to indicate whether you will fully meet the requirement, whether you partially meet it, or whether you're offering some alternate solution. OK.

And if you are all offering that alternate solution, you need to just give us some idea of what that is.

Thanks.

We also have rice FW pages and historic data page in that spreadsheet which should help you see you know what are the reports that we have, what are the interfaces that we have and it's it's not really giving a lot of detail about those, but it's giving you some idea of what they are and how complex they might be. Hey.

Umm, there are 20 essentially sections of requirements and this is just listing those and the slides from this point forward you'll see the title will have a one or two or three that's related to these different sections and those requirements.

So you might, if you're asking a question in chat, you might put the section that we're in so that we get a better clue as to what you might be asking about as far as that too.

Alright, uh, the very first requirement is about rules.

For those who know me, I'm not a huge rules person.

That doesn't mean I don't follow him.

It just means they're not.

I I don't always give them all of the weight that other folks give them, but I strongly encourage you to follow the rules because they will be enforced.

These are just given as a places where you can go to find out more information about those particular rules.

Alright, this is where in my view we start getting really to the meat, to the pavement management system and really what a pavement management system is for is to obviously manage pavements.

OK.

So we're gonna collect and share pavement related data, and we're gonna provide decisions.

Support.

That's really what our job is and the sections 2.1 is basically how much money do we need in order to manage our pavements.

So when the governor's office is asking how much does K dot need for this or that we're trying to answer those questions as they relate to our pavements that were responsible for maintaining and in section 2.2 is the other direction of the same thing.

The same thing it's it's what will the pavement conditions be over time given money over time in certain amounts?

OK, so that it it really is the meat of what we want to do with pavement management.

So we're gonna collect a whole lot of data.

We want to answer these kinds of questions with whatever the processes are that come out of this procurement.

Hey I've already mentioned before that we do have a glossary of terms and will point that out again later.

As to where you can get to that, the other thing is there are notes in the uh spreadsheet at times under some of these sections, and one of these is like 2.2 says, all of the requirements that are listed in 2.1 also apply to 2.2.

It's just a different subject to when you're answering 2.1.

You're really answering those for both of those two directions of looking at the problem.

Alright, selection Section 3 is what we'll refer to as the project selection piece. Somewhere, I've notes they're there.

You know there's nothing.

And this slide actually serves a couple of purposes.

One is that I I think Kansas, well, I know Kansas is different than every other state. Every state is different than every other state.

Umm, but what I want you to understand is that we have more a lot of years done things differently than most States and we have what we call 1R type projects or the very light projects that we have used state funds to maintain our system for 30-40 years.

And the way that that money was, first of all, uh, sold to the legislature was to say, here's what we will do if you give us this amount of money.

And then secondly, follow that up with year after year after year taking the available money and using it to select locations and scopes for projects that maintain the system the way that we promised.

ℜ Charles Pilson joined the meeting



Rick Miller [KDOT] 16:54

Umm, what's different?

I think in our historic system and many systems both present and past, is that the system really does get at the scopes in a level of detail.

That's that's greater than what a lot of systems I have seen and that is it doesn't just say, hey, you need to do light maintenance here.

It says you need to do a chip seal, and that's based on the fact that the you know the roughness is not something that that is too much.

The cracking is a kind of cracking that we can seal up with the chip seal and it's not gonna reopen up immediately.

There's not running that we're dealing with those kinds of things.

So we want to make sure that you understand we're not looking for something that says, hey, this is an area that's bad.

You need to do something really heavy.

This is an area that's not so bad.

You don't need to do as heavy a thing.

We need to go beyond that and really make sure that it's it's getting us answers to questions that say of all the available things in our toolbox, which is the right one, at what location for the money that we have.

It's an optimization type problem.

The other thing is that we currently we have a different group that makes the choices for the pavements that are beyond doing through one R and that is that we have a prioritization formula that takes data that we provide and does a ranking. It's a.

It's a worst first piece, so we have both the optimization piece and the worst first piece.

In this we will need to continue to feed that prioritization piece.

And so it's, it's stipulating some of the details of the data that we need to provide to other folks so that they can crunch those numbers.

We would not mind being able to essentially crunch those numbers internally to our system as well, so that would be an option there, right?

And you went very low, miles.

All right.

So a lot of these slides from for a while here are just sort of laying out the kinds of things that we're going to that that are listed in our requirements more or less as outputs.

And so we have things like the HPMS or highway performance monitoring system. And I realize that we're using acronyms in here, but frankly, if you don't know what these acronyms are, you are behind in terms of knowing what we want and being able to help us out here.

So I'll use the acronyms, look them up if you don't know what they are, but we certainly need help getting some of these things in place and for instance, with the HPMS we have a process.

Today we go out and we collect the data that we need in order to feed that process and we passed that data off to planning for them to do conflation against their network and so forth to line it up so that they can then pass that data on to federal highways.

But we still have to collect all of the data.

That's that's appropriate for feeding that there are other things that are in that like the a federal report card that we would like to be able to do that up front and know what the answer is before we submit our questions.

We, we'd like to be able to check our work, so there are some requirements in there that are like that that are basically intended to help us do a better job providing the data that we need to provide for folks like federal highways and HPMS.

We also have the dashboards both on the federal side and the state side.

These things change quite frequently, but we need to be able to feed those whatever they want when they want in terms of pavement condition data primarily. OK.

So we just need that ability to as folks are saying, hey, we need you to feed our dashboard that we can do that.

And I know none of them are really set up, push, pull or anything like that right now. Most of them are are manual passes, but we would like to get away from that as much as we can and and make them more systematic.

A lot on this slide got another acronym.

It's a four letter word, tamp.

And So what I can say to that is that we have done a couple of these in K dot already. We need to do another one in two years.

We we will completely change how we have done it compared how we will do it compared to how we have done it in the past and it's basically going to be a documentation of the processes that we use.

So the requirements are there that basically say we need to feed the tamp whatever it is that it needs.

But the reality is that it needs to be a documentation of what we do in terms of making pavement condition decisions and then showing what we expected to get and what we got in that process.

All right.

Moving on Dot isn't Esri shop, at least in terms of our planning group, which is our primary folks for they are our uh.

Our our data folks are inventory folks and they use Ezra Roads and highways and they use the Esri GIS products.

Umm, we need to be able to play nice with them both in terms of they have data that we want and we give them data.

Umm, so we we need to be able to continue to do that in whatever PMS you know using whatever PMS system we end up selecting out of this process and implementing out of this process, OK, there isn't out there that says that currently both K dot and OK dot planning and the PMS group use different referencing systems but what I will say is that PMS uses the referencing system that planning used to use and they are still fairly consistent.

So I wouldn't get horribly upset by this, but we just need to make sure when we are passing data between planning and pavement management that we understand.

Well, that we either we do it in a way that it that there aren't differences or we come up with ways that we make sure that those differences are not causing us grief. Alright, on the GIS.

Umm, we expect the solution will have some GIS capability.

If the tool that we are purchasing has good GIS, you know that allows people to do things like, you know, look at pavement, surface age and you know when last action type and you know whatever they might want to look at in a mapping format from the data directly in the system.

Great.

Umm, but if not then it needs to be implemented or implementable with the roads and highways and arc GIS tools that planning is using.

And even if the solution has a good GIS system, we still need to play nice with the arc GIS stuff.

The historic data this one causes lots of people grief and what I'll say here is that our group, the payment management group, is very, very comfortable with large data sets.

We're we're happy to use our Oracle and SQL and manipulate data and we have our own little data center in terms of being able to store lots of images related to pavement, data collection and profile data.

And 3D uh LCMS type data.

We have lots of that data and we have had that for years and we're very comfortable maintaining that, taking care of it, doing all of the things with that.

And we're not very excited about paying someone else to hold your data hostage and to have pay for it every time we touch it.

However, despite my snide comment, we recognized that the the data needs to be where it needs to be.

So if it needs to be someplace else or parts of it need to be someplace else in order to.

Umm, what for the system to function or to to work?

Well, then you know, we understand that we, you, you gotta make things work the the right way.

So we need to to figure out how to do it in a way that we're not paying for storage of a bunch of data that we use only occasionally.

We're not paying to move data around a lot because we do move data quite frequently.

We we need to have data in the right place and be paying the right amount to to keep it secure and take care of it and use it hey.

Alright.

I've mentioned already a couple of times that we collect a lot of the pavement condition data, and by that I mean we collect a.

It's a paved metrics manly LCMS data collection system, so we're getting, you know, 3D images of the road and.

Intensity and and UM height type data from that and so that's one piece of what feeds our systems today.

We also have LIDAR data available to us.

We may collect LIDAR data at some point in the future ourselves.

We have falling weight, deflectometer data, traffic speed, deflectometer data. Skid data.

Lots of other things and we have processes in place that help us with where do we need to collect this data, where are we in the process of collecting it?

What of that data has been processed?

What of it has been, you know, it's completed all the processes and it's done for this year.

All of those kinds of things, but if that can be melded into whatever the pavement management system is, obviously that would be an an improvement, something that we would like to have as well, where as much as possible from essentially pre collection all the way through collection and using that data and then starting up again the next year that we have processes that make that as clean and convenient as possible and that we, you know, we know what we've got at any point in time and where we are and what we still need to do in.

All right, project tracking support and this one has caused some grief for some people to.

Umm, there is already an agency project tracking system and we're not trying to replace that.

That's called when CPS.

It's really designed for a project has been dreamed up and it's starting to work its way into the funding processes and get into the the letting schedules and all of those kinds of things.

That's really what win CPMS is about.

We are more interested we we use that to tell us, hey, there are projects coming and

they tell us where these projects are coming.

They kind of what's coming with those projects and we need to know that with anything that's pavement related.

So that obviously as we're selecting projects, we don't do something stupid like select a project where they've got something planned in a year or two years out or something.

We also need to know that so that we also need that project to know that projects are coming so that we can, we actually use them as input at the beginning of our completed rehab form that I'll talk about in a minute because we're we're feeding we table that tells us, hey, there's a project coming and we expect them to get that done this year.

And then we're expecting field folks to when they do get that project opened, unrestricted traffic fill out one of these forms and let us know, hey, yeah, we did do this.

We did do it from here to there because we may not have the right begins and ends so they can correct that.

We may not even have the right action.

What they did may be different than what we thought they were going to do, so they're allowed to tell us that and they tell us other things, like the type of materials that were used and whether or not they put rumble strips in and those kinds of things.

So ohm this in this piece of project tracking is more about someone has planned a project and we need to just kind of keep track of when is when is somebody actually going to be working on it and when are they done with it so that we then know to put it in our system that such and such an action was done at such and such a time. So we can use that information in our models to help with what was the benefit of doing that action at that time.

You know, did we get our money's worth? Kind of things.

It also goes back to planning.

They use the outputs for.

They use a a sheet that simply says these are projects that were reported on that triggers them to then go get whatever information they need to update the inventory system as well they.

All right, we're up to requirements 11 or section 11, but Group 11 requirements.

How about that?

And these are about reports.

There are 23 specific reports that are listed in the requirements and report is I probably don't use any of these words correctly, but report in my world is sometimes it's, you know, the old paper report kind of thing, or a electronic facsimile of an old paper report kind of thing.

And yeah, those are in there.

It could be a map.

It could also be.

Some other uh, simply a a query or something like that.

That then gets fed to somebody else.

So I I may be misusing the term, but the the concept in providing those is that those reports are listed there with some idea of what they are and how difficult or easy they might be to for for you to incorporate.

Hey umm, I would also call your attention specifically to the last line in that sheet where it says we know that we probably forgot something or another.

So plan on there being a few more reports in there so you know give us a little buffer room there.

Plan for that upfront.

Next up is interfaces and the current interfaces that we have are pretty simplistic for most of them and the reason I say that is most of them today are manual.

They're done by, you know, create the data set that you want and email it to somebody else, or create a spreadsheet and send it somewhere else.

I obviously that works, but it would probably be better if those things were more directly connected and and talking between systems, which is what I take as the definition of interfaces here.

OK, there are a few of them that get a little little more complex.

The NCE viewer is actually something we wrote that pulls all of the images and data together, and it's like you're driving down the highway and seeing, you know, the forward image is the downward images and the data that's associated with those images in terms of roughness, running and faulting, and cracking all at the same time.

OK, so so some of these do get sort of complex, but there are that they do exist already the the complex ones largely exist already and so they will just take some some work to just make sure that we have a plan for how we're going to address those moving forward.

Umm.

I am working on a configuration document still which I would say is more of a. This is how we do things today.

Document then they true configuration document.

And that's partly because I don't know how any of these existing systems work. You know, I have ideas.

I've seen demos, those kinds of things, but I really don't know how they work and so I I didn't feel like I could write.

This is how you need to do this.

That or the other, and besides that, the stuff that's in the the brackets in that second paragraph to me is extremely important.

A vendors, like many of you, have already built systems or configured systems for other folks like K DOT and we really want to take advantage of what you learned in doing that.

You've done whatever you've done for a reason and what we want to do is say, OK, here's where you have access to all of our data.

Here are the end that the outputs that we want the end the results of what we want you to do.

We're not going to tell you how to connect those two ends.

We want you to take your best shot at how do you connect between those two places based on your experience and what we will do then is once we see those outputs, we'll we'll look at those and make sure that you actually got to the outputs the way that we you know the the outputs themselves are what we want uh or reasonably close.

And then we'll look at how you connected those two things.

How did you get from our data to those outputs and let you show us?

You know we we will gain from from your experience at that point and if we're happy with that grade, if we think it needs a little tweak in here or there, great, if we wanna say Nope, you can't just make magic happen between there and there we we want more in there that we actually know what's going on then you know we'll we'll deal with that if that's the way it comes out.

But to me this is a very important concept that I want you all to be thinking about. This is really where we recognize we are paying you a lot of money.

You have a lot of expertise.

We wanna take advantage of your expertise.

All right.

Completed rehab form.

I've mentioned this before.

It's a very simplistic form.

It's simply pulling data from our existing table.

It says here's where projects are and what we're doing is a lot of different people out in the field who are responsible for projects are telling us, hey, we're done with our project here and they're feeding us back information from that.

It is a pretty simplistic form and really it's the only true form that I'm aware of that we have right now.

If you're thinking about forms in terms of what does the screen look like, that's that's not what I'm thinking of of forms, and frankly, most of the time I'm not gonna care what the screen looks like.

And you know that's that's a later piece of that.

l don't.

I'm not worried about design in that part, hey.

Workflows.

The completed rehab form is sort of a workflow or it could be a workflow instead of just being a form, and that is the the problem with that is we don't know who it's going to each time, but in other words, there is data that is getting passed around and goes through you know two or three hands along the way.

And so it would be possible that that could be converted into some some flavor of a workflow instead of being a form that it is now.

The tracking is that we do for transportation planning is sort of the same thing is it could be converted to where instead of it just putting out on a a website, hey, here are the projects that have been reported, it could actually send them an email or something that says, hey, this next one's done you know.

So if if the process is, I don't care how these processes happen, they just need to happen in a reasonable fashion when we get to the third bullet there and I talk about the one hour review process, this is a bit more of a umm it it?

It could be a very large workflow if we allowed it to be, and it might make sense to do that.

And So what this process is, is that our office, the Payment Management office, goes through, we collect data, we analyze that data, we run it through tools and we end

up with here are the locations and and tentative scopes or the location for each of those locations for the next couple of years of 1 R projects.

And we put that list and maps and whatever together and send it out to the districts to review.

And then the districts look at those and they make choices about which of these makes the most sense for them.

And they're doing things beyond just pavement condition.

They're also worried about we can't close every highway that goes into some town. They're worried about how do we get reasonable prices by having at least a couple of projects that are nearby.

They're worried about if we do this scope now, what can we do in six or seven years when we need to do something again?

So there they are looking at a lot of things with that.

And so it's not just the the district engineers that we passed that to, but then they pass it on to area engineers and other folks.

So there's a whole group of people that put their nickels worth in and then we end up with a a review where we actually have a few people that go on the road with these folks.

Well, we'll actually that data comes back to us and we sort of get a first pass. Yes, this is what we want to do.

Then we send more people out and they they all go look at it on the road together. And what they're really doing at that point is they've got the locations pretty well selected.

They're firming up.

This is the scope that we want to do at this particular location, so that whole process, there's a lot of back and forth and a lot of people involved and it might be a good process for I probably multiple different workflows.

You know, here's how that data gets passed and we actually get the reviews back and those get reconciled into.

Yeah, here's the ones that we need to go look at some more, that kind of stuff. Umm, we also we produce pavement condition reports, but they aren't really tracked. But we could make that sort of a workflow as well, where if you know people want certain things, certain data items from us that they could request those more directly and we could provide those to them.

They, and I'm sure as people who are more into doing work flows and have been

around them more, get to looking at what our systems do and how our processes work.

You'll probably make recommendations for that.

Should be a workflow here there whatever.

OK. Uh.

I again, I'm not a strong rules person, but rules are there for a reason.

There are a whole bunch of IT rules in this section.

And please do follow them as appropriate.

Umm.

Security.

Same thing.

We don't want, you know, obviously the system needs to be secure or it won't work for us.

But at the same time it needs to be secure in such a way that we can still perform our business functions.

They and that applies to whether that's, you know, the the portions of the system that are inside of K dot.

Any portions that might be external that you guys are taking care of whatever you need so that we don't find ourselves without a system because yours is locked up by some ransomware or something.

OK.

So, and that's the purpose of the security gobbledygook, is to make sure that that doesn't happen to us.

So please do what you need to.

I'm trying to rush through these because I'm running out of time, but they're also to to me, these are things that you probably you all of you are probably more comfortable and understand these much better than I do.

Disaster recovery is sort of the same thing.

We have a process here.

It probably needs to be revised based on whatever we implement and then on top of that, if if you have an external system for using your cloud based system or something, you'll have to assure our IT folks adequately that they're happy with whatever your disaster recovery process and and requirements are. Umm.

This gets a little muddy because I'm not sure how well it comes out in the

requirements documents, but we have not stipulated whether this is an on Prem solution or whether it's a cloud solution.

Umm.

Or whether it's some hybrid.

But however you're proposing it, or even if you're proposing it in multiple ways, you're going to have to tell us what we need.

What?

What equipment we need in order to make that work?

All right.

And #20 data integrity and really this one comes out of I don't want a system that every time I touch it, I can only go in through the user interface that I can't take advantage of my SQL abilities ever without have to turn 19 things off and then turn them all back on in order to make it work again.

So we understand the need for safe, secure and clean data, but don't tire hands up so bad that we can't use our data.

And with that, my voice is gone.

There, he's ready to go.

We will pass.

OK, so one of the things that Homeo Group was hired in the beginning to do was to evaluate the system and understand what they currently had to help them produce a set of requirements that you get out of that spreadsheet.

Part of this project involved the development of a model.

The development of a model and that modeling, I'm the citizens.

Things I do in my life and the modeling itself can be a little bit complex to

understand, but the point of this is that it's trying to capture the entire way in which the PMS system currently works and try to also offer some points where it says.

But we would like it to work this way instead if we can.

So this what I'm gonna go through is some of the biases pieces of this model and really to help you understand how to navigate this model.

Ohm, this is the main splash page on this model, and it's actually a really long document.

It's not side to side when you get to it, but I had to break it up for this slide.

I wonder if there's a way of getting this out of the way.

Now stop in the middle.

So I do not know that I stopped the presentation.

What did I do?

Yep, we stopped the presentation.

Ohh, so go back to teams here up there where it says teams and now yeah there. Yeah.

Pologize for that I'm not used to doing this teams thing.

That all guess I'll step through all the slides real quick.

Not used to having one monitor either.

All of these, uh, one comment as I'm stepping through all these slides on requirements.

All of these are captured within our requirements diagram that we present to you. Umm, in terms of the splash page, I've identified the area that we discussed the requirements of our project, the modeling and the requirements that went into this. The documents the diagrams that we produced out of this requirement.

Instructions on how to use this model and suggestions on your best way of going about using this model in terms of trying to understand what we currently do and what we would like to get to.

In terms of navigation, the diagram, uh, when you first present it has a in the upper left, a series of different collection pieces.

These are kind of the primary navigation point, so you can select the type of model diagram that you want to get to.

It includes links to the glossary as Rick has talked about previously.

A complete list of the requirements and the complete list of use cases.

The vendor requirement spreadsheet the vendor requirements, Excel format, and the whole thing in a PDF format and you know how you want to get it.

The pavement condition.

Data quality management plan link and there will be a link in the very next one more link to added to this as we eventually get the recording of this meeting.

Uh, we have a secondary navigation point where once you select up in the primary navigation, it presents one or more or zero or more documents that go into this and those documents are really the links to the diagrams.

When you click on one of those, you will then on the right side get the diagram.

It might take a few seconds cause some of these diagrams are fairly complex in terms of their cross linkings and the HTML that has to drive them.

When you get to those diagrams, you're going to have model elements presented in those diagrams.

Umm this third tertiary navigation generally you probably aren't gonna want it unless you want to get down to a very specific thing, but you can select that and get to a a very specific model element that exists within the diagram.

There's an area that displays all of the diagram and note that a lot of these diagrams to get them out and viewable.

They're very large diagrams, some of them, and you're gonna have to zoom in and zoom out to be able to see all the details in the diagrams.

Especially when you go to this fifth point where there's model element property links, they don't always exist, but if they do exist, they give you the option of linking and getting to the property of that specific model element.

On this item 6, there is either one or two potential link sets here, and they're not always present, but they're transfer links that allow you to go to the front links and two links, and they'll present this as subdiagram links and then the front two links and this kind of gives you what that image.

It's not very good capture of the image, but what the two different graphics look like when you look at them down here.

So this gives you an idea of kind of from a navigation standpoint how to use this model when we get into this, uh, we can talk a little bit about how we would work through a particular set of.

We want to go see something.

For instance, let's start at the data flow and go into the actual modeling piece. So we would select the diagram type.

In this case, it's business process diagram.

Select the diagram itself, which would be this business modeling diagram.

When we bring that up, you get a huge diagram which I'll show you in a minute. But one piece of that diagram will be this small piece down here, which really is the biggest part of the entire PMS system.

This modeling diagram and in that diagram it has those transfer links down below, and so I zoomed in again to look at what those to show, what they look like, and then down here and we're kind of missing a little bit because of the menu down here.

But down here again, when you look at the slide deck itself, you will see that there is additional links that allow you to understand how to get to the next piece. And so when you select it, it will bring up this predictive modeling. It brings up an entire large diagram. The left most piece of this diagram is a parallel process where we're collecting all of the data and all of the different ways that happen during the beginning of the year to the middle of the year in which they're they're collecting the various data, distressed state scores, transfers, cracking surface friction, actually doing the scanning of of the highways.

We're just collecting all the data, all of that filters, eventually getting to the predictive modeling.

And then when you get to the predictive modeling, if you click down on this transfer link again, you get to another place that allows you to do the predictive modeling activity diagram, which gets you to this diagram.

I know you can't read the details, but right in here is this place that we put placeholder for you and I'll describe this diagram in a minute.

Α.

Where you can actually see it better, but this little place hold that says this is where you get to tell us how you're going to do it and how you're gonna make it better and easier to do than what is currently being done.

When we get into the requirements, this is a big picture of the requirements diagram.

And it's like I say, these diagrams are very large and so you have to zoom in to get down into the various individuals.

But if you look through this, you will note this has all of the different twenty groups of diagram of requirements that are here, but each individual group of requirements might have one or might have 20 different requirements.

You can select on each one of them to get details on that requirement and as what needs to be taken care of.

A lot of these requirements you might need to go to the glossary at the same time just to get a good understanding of what's there, but this gives you a scope of what the requirements diagram itself looks like.

For an example requirement, this gives you a layout.

There's a lot of the software that I used to generate this generates this entire system and it produces a lot of stuff that you probably don't care about or don't need.

Matter of fact, it produces a lot of stuff that I don't care about, don't need, but I can't figure out how to turn it off.

But it does produce things you will need the element name, the description of the requirement, transition links either from or two that give you to the either what is

driving the requirement, the kind of business process or what the requirement is driving, say in terms of use cases.

The idea of the requirement attributes about the requirement, including things like the ID, the sort.

Some of these aren't aren't filled in the kind of requirements is a functional requirement the kind of risk that we see in this requirement, whether it's low, medium, or high.

How we expect this to requirement to be verified either through analysis, an ad hoc process, the priority that's requirement, whether it's mandatory, expected or desired and finally down below if you get yourself trapped in ohh I see all this text but I don't see a diagram of visualization.

Then you can get down to this link here which shows you actually where all the diagrams this particular requirement is presented in.

Going into the next thing, this gives the master overall data flow process for PMS. This is not too large of a diagram.

Ohm pieces of it just because of the screen size didn't really fit on here.

There's a small section over to the left of this, but it's it's just enhancing the district app activities.

So what the whole point of this is to show the overall process where we start in January 1.

And as you go through this process and you can ask questions and your questions or in the chat or at the end end of this presentation, but how we go through it? What data elements?

What databases are connected?

All of these PMS databases currently are Oracle and their internal to PMS. All of these databases are the external databases that have interfaces into this

process, and eventually the elements that this process flows into.

These are all of the interfaces that we really talk about that have to go out to the other K dot activities that are not within the control of PMS.

And so as Rick presented before you know, this talks about the interface to win PMS, the tamp process, the one R process, all of these things that HPMS process, all of these pieces that actually talk to the system down here is this modeling piece. So I showed you a little tiny bit of it before and this modeling piece gets you down to this point where you're understanding and trying to work through the modeling. And as I know, you can barely see it down here, but it says see sub diagram and that uses those transfer links.

And so when we click on that well, we'll get to that in a second.

I forgot we we also present in this space.

You have to go back.

Yeah, we we also present in this a time ordered Ness of all of this process, the things that start in January to February and go all the way to December and everybody gets a cookie who can figure out what's wrong with this particular diagram.

Yeah.

Well, you have to buy the cookie yourself, but you can have a cookie.

Give yourself a cookie.

Every one of these are activity types of of pieces, and they all link and have the ability to link into the use cases that dry them.

Well, these are these cases.

And so we looked through all of the different ways in which the various activities are linked together and we put those together as a use case diagram in which we have actors interacting with processes.

The ovals themselves are the use cases that identify the nature of what has to happen.

They're kind of grouped by General PMS operations or data collection activities or interfaces, but there is a little bit of blending cause some of the use cases go across all of it, so you can go into this if you wanna understand the diagram, the use cases themselves, and how they're working for an example.

If you bring up this use case diagram on prepare, the generation of field data collection lists, then you can get the use case name here and there's a kind of an order to that name.

You can get the use case properties and what what we expect out of that the scenario and this is the most important part is who does what and more important in the sense that what actor is doing it and the action that they're doing, what the system response is just like a normal use case.

And then eventually you get back to what the system is doing.

I recognize it's maybe not the easiest thing to read on screen right now, but you can get the presentation and zoom in later.

You can also get what are called tag values, which gets you more detail as to what's going on in this, and then down below the the menu element and then you know ask for settings, taskbar settings and then say go away.

Yeah.

Umm.

Visual let's see one of these.

Uh.

Uh, there was taskbar alignment on.

That's my behaviors.

This one automatically hide the taskbar there.

Now it'll go away.

How's that?

Where we get a whole bunch more screen real estate.

So down here you get again a link of diagrams, links to all the diagrams that use this particular use case.

Going into the modeling, this is again looking at the large scale of this modeling. We have broken this.

Ohh I I apologize, this is the more detailed view of the modeling.

What we have captured on the left side of this modeling is the current process that is used by PMS.

We captured it to as hot as detailed level enough that you can understand what the various tasks and activities are, but we have not captured them to a point where you could actually generate a whole system from it on the right side.

This is where your solution goes and more importantly.

We want you to propose a solution that's at least as good as the current K dot solution that is based upon your knowledge.

As Rick mentioned before, that uses as much of the K dot data that is available in the makes the best predictive decisions for the remaining life of the pavement.

That's the whole point of this, and it maximizes the benefit of the payment treatment and minimizes the overall cost to the Kansas taxpayers.

That's the best solution out there.

And when we when Rick pointed had that one slide out there, that's the best of the best of the best is gonna use all of the data, historical and current.

And it's gonna come out there with a predictive system that will do it all.

And our AI overlords will then tell us how we get paid and how much money we're going to make and everything.

Obviously, that's probably not gonna be what you proposed, but at some point in time there should be solutions that have the ability to go out there and tell us the

best way of treating the Kansas highways that preserve the highways for as long as possible and minimizes the cost to the taxpayers.

That's really what matters here.

One of the things that Rick keeps telling me, everybody's concerned about interfaces, so we have a couple of interface diagrams to give you a an idea who's talking to who and and just to a certain extent.

And I wanted to present these as our last two slides.

This is the input interfaces and showing what external system, how we're talking. What other systems?

It's talking to eventually getting down to the PMS operations.

How it talks to the districts, all of these things are linked elements that you can go in and look at and say, oh, oh, what kind of shoulder data am I getting?

What kind of traffic data am I?

Am I getting not all of them are filled out in enormous detail, although there are a few of them that are, and then all of the UK have.

These are the primary Kansas databases that we interface to the output interfaces. This also talks about the nature of how we get that data out to the other systems that depend upon PMS, and so all the K hub systems that we actually push data out to the data collection activities are actually tied into the outputs, the transportation planning, the even the Turnpike authority gets some of this data.

So it gives you a sense of where all of those interfaces are and how they're used. And I think that is it.

OK.

So you've you've heard from Jerry and you've heard from me and you've heard Bell say that, hey, he is the person that that all questions go through, but he's in the room so.

Well, not literally, but well, yes, but we will.

We'll pull up chat.

I don't know if there are questions there.

We'll start there and see if there are any and if not, then once again I would that figure out how to get out of here.

Wait a minute.

That sounds good scapy.

Alright so.

Yeah, they took me clear up like.

And I think you go to.

Yeah, alright.

So looking at the chat, is there anything there?

Could the agency please specify the estimated number of individual users who are require access to the new PMS?

Both K DOT staff and external entities involved in its operation and data utilization, including interfaces and approval processes.

OK, so.

Yeah, the the short answer is the pavement management unit contains about eight people.

So we're not a very big group and that would be the group that would be involved in actually telling the system crunch numbers, all of those kinds of things that would include the data collection pieces.

Most of the data processing pieces and so forth when you get beyond that and you start saying we're going to take our results and we're going to share them with other people, that number starts to expand pretty rapidly because some of those things are, it's putting it out to websites.

If you're thinking about in terms of the number of people that respond to our completed rehab forms, so that's actually people that would interface.

They currently interface with our forms.

That's in the neighborhood of, I'm gonna say 50 people a year that touch that form. And I can.

I can go get a real answer to that, but just to give you some idea.

But they touch that form.

You know, they've got one or two projects.

So they touch that form, you know once or twice a year, you know, and so so so does that answer what you're hunting at for that as far as, like other folks, we have 6 districts.

They would the district engineers, certainly we need to provide them with the ability to, you know if the solution has a GIS component they would need to have access to that set of tools, be actually connecting into the system and seeing the things that are there.

Does that answer it?

All right.

We have a process question.

A bitter registration form has mentioned checklist on Page 3 pill do you what are you purchasing folks?



William F. Nolen [DAPC] 1:05:48

Yeah, I can go with that.

So if you have never done business with the state of Kansas, you have to register on our E supplier system.

Links are included there in the RFP document.

Umm.

A simple to register and once you are you can submit your bid.

Umm, if you weren't originally invited, but you found out about this in some way, you do need to be officially invited, and I can actually put you into our system so that you may get notifications about any changes to the bid like we put in an amendment to extend recently to include this pre bid meeting.

There may be other amendments we we'll definitely have Q&A coming up, so please register if you'd like to do business with us.



Rick Miller [KDOT] 1:06:33

OK.

And then we've got a question that talks about mandatory web based requirements. And does this mean that we're looking for software as a service cloud based software only?

Or we're open to on Prem and my answer to that is we are open to either or even a hybrid version.

lt's it.

It's what makes sense for us.

Umm, so you may propose either or some flavor of both.

Umm.

And we will deal with it.

And one of the pieces in there that is the big concerning is there's a quarter of a petabyte of data out there.

That's historical pavement data, and obviously the the necessity of moving that all into the cloud, using it all in the cloud to do analysis.

That's pretty expensive, especially if you then wanted, then pull it back out of the cloud to do something locally.

So ohm that's the one concern that we have in terms of the system is the ability to manage the data, especially the historical data.

Let's get to it.

Are there other questions?

And again, remember, this gives you the chance that if we screw up answering your question, you get a chance to follow up and ask again.

So I strongly encourage you to ask.

Think they can unmute, right?

Yes, I believe you can unmute or raise your hand and we can unmute you, yeah.

I raise your hand if you're trying to talk and you can't unmute.

Bill, please.

Alright.

Process debate.

Alright, yeah, I can't answer a response.

Uh, process question, Bill.



William F. Nolen [DAPC] 1:08:54

So I'm looking at proposals response 2.2.

It's just saying that you're required to prepare your technical proposal following the same sequence as the RFP.

So I don't know what conflict there is there.

You have 2.7.

Someone opened up so they get explained.



Kate 1:09:23

Yeah. So can you hear me?



William F. Nolen [DAPC] 1:09:26 Yeah.



Kate 1:09:27

This keeps my foot Trimble.

Hi umm.

So in 2.2 it's at the proposal format and so it starts with transmittal letter, bidder

information qualifications and I assume that you wanted the proposal to follow that format with the explanation and narrative following that.

But so for instance, it shows experience after qualifications, but then when you go down to 4.5, they appear in a different order and some of them are not there.



William F. Nolen [DAPC] 1:09:52 He.



Kate 1:09:58

So is 2.5 more informational and we should only follow 4.5?



William F. Nolen [DAPC] 1:09:59 OK.

Kate 1:10:06

I realized this might take some some digging into. I have a follow up question with it as well. So I had planned on submitting it in in writing.



William F. Nolen [DAPC] 1:10:14

Sure.

So just generally what we're asking for is that you make sure those components are included.

It's not really stating any order of how things need to work, and so anything in Section 2 is very general, but it's it's requirements.

The anything in Section 4 is specific to this project, so if you're gonna be able to include everything in a manner that you think will be more acceptable, I would go with what's in Section 4, but the transmittal letter doesn't necessarily relate to how the project works.

Umm.

Any and some of those other things we do want you to list qualifications and experience those we try to match those up to what the what the team gives us in terms of what they're looking for.

But I wouldn't get.

I wouldn't get bound up on the order of things and the Section 2 or how that

conflicts.

Just make sure you include everything in your proposal.



Kate 1:11:11

l appreciate it. Thank you.



William F. Nolen [DAPC] 1:11:13

No problem.



Rick Miller [KDOT] 1:11:23

Any others? Anyone still contemplating your typing? Lean and hearing none, we're going to move on. Well, maybe.



William F. Nolen [DAPC] 1:11:46

OK, so we can go and start to wrap up. Rick, did you want to do any final comments?



Rick Miller [KDOT] 1:11:56

Uh, no other than you know, again, this is your chance to ask questions after this, the questions that you ask will be the written will be written questions and we will respond to all of them at the same time.

So if we misinterpret what you're asking, you won't get a chance to follow up. So you still have that chance here.

Otherwise we are moving on and we look we're we're excited about what you're going to offer us so.



William F. Nolen [DAPC] 1:12:23

Alright, great.

Well, let's just reiterate what the timeline is for the events for the the RFP. Those questions that you send to me through email.

Uh are due on December 15th, and that's by end of day, December 15th.

Once I get those, I compile them, give them to the team, they take some time to

respond.

We always post uh with ample time to review those in order to create your best response in your final bid submission.

So and that that date is again January 15th to all bids into 2:00 PM.

So if you're emailing your bid in and it's got multiple parts or large files, I would definitely take the opportunity to send those in early and get confirmation.

Our team always confirms when we receive bids and that way you'll know that everything was received.

So don't count down the the seconds before 2:00 o'clock before sending that in, just to make sure we don't hit any technical issues with your submission and on page three of the RFP document is a good example of a checklist.

So if you're following all the rules for the RFP and and checking off things as you go through that list, you definitely are doing the right things.

So the question was when when can we expect answers to questions? Again, it's about the volume of questions when the team can get together and answer those, we usually see that done within a week to 10 days.



Rick Miller [KDOT] 1:13:58 Sure.

The amendment 10. Yeah, like 2 days.



William F. Nolen [DAPC] 1:14:08 The You have something right?





William F. Nolen [DAPC] 1:14:11

OK, alright.

So use that checklist to your advantage.

Also, just to go over the requirements in terms of what you need to turn in, so you need to answer all the questions in the RFP.

I've been details document you need to fill out anything required in the RFP, so anything with blanks or signature lines and you also need to fill out the requirements spreadsheet provided by the team.

If you do all those three things and send in your technical proposal, umm, that's that's considered a quality submission and it should go well.

So let's let's take off the other items.

Umm.

The team wanted me to mention that once the project gets started, so payment is done by deliverables and that will be some information for that included in any signed contract.

Uh, so when we say if there's any mentioned in the RP details about net 30, that's kind of a basic basic reason or a way of of payments are scheduled and how they're paid out.

Umm, but for this project all payments would be made based on successful delivery of services.

And once the team has all your technical proposals, they will evaluate those and then they will see cost.

They combine cost and technical to get best value for the state, but then make a selection that does take some time because these are very complex submissions and they want to make sure they get the best candidate for that.

So I will defer to the team on any timing for that.

But we are working into January in terms of this bid bid event.

So there will be more details later about when that selection process is gonna begin. And with that, I'm going to wrap up.

Uh Kate Dot team, do you have anything else to add?



Rick Miller [KDOT] 1:16:11

Checking.

OK.

No other questions in chat, so the last call.

Not hearing anything.

Well, we wish you all luck.

Umm, we hope that you have what you need.

If not, then write your questions.

Get those to us.

We will do our best to respond.

It did all of those questions and answers will be supplied to everyone so they they

will all come out in one big bunch and after that we will be very busy, obviously waiting for your.

The next thing which is your submissions.

When we get those, we will be very diligently reviewing those and making our selection.

So I thank you all for your time. Gary, thank you too.

William F. Nolen [DAPC] 1:17:02 And I think.

Rick Miller [KDOT] 1:17:04 Anything else, bill?



Henry Canipe 1:17:04 Thank you.

William F. Nolen [DAPC] 1:17:05 Nope, that's it. Thanks everyone for your time and I appreciate it. Have a good day.



Henry Canipe 1:17:10 Thank you.



- P_{\star} **Kate** left the meeting
- *P*_∗ **Henry Canipe** left the meeting
- Arshadi, Amir left the meeting

- $\boldsymbol{\aleph}_{\!\star}$ Wong, Chi (Oakland) left the meeting
- $\boldsymbol{\aleph}_{\mathbf{x}}$ **Tyler Pauley** left the meeting
- $\boldsymbol{\aleph}_{\star}$ Cimini, Gabe left the meeting
- $\mathcal{P}_{\mathbf{x}}$ Tari Muth left the meeting
- $\boldsymbol{\aleph}_{\star}$ Camire, Brian left the meeting
- $\boldsymbol{\aleph}_{\!\!\boldsymbol{x}}$ Aaron Gerber left the meeting
- \aleph_{\star} Laura Miller [KDOT] left the meeting
- $\boldsymbol{\aleph}_{\!\star}$ Ed Shappell (Trimble) (Guest) left the meeting
- $\mathcal{R}_{\mathbf{x}}$ Erin Calcari left the meeting
- \aleph_{x} Charles Pilson left the meeting
- $\boldsymbol{\aleph}_{\!\star}$ du Toit, Gerhard left the meeting
- \aleph_{\star} Rick Miller [KDOT] left the meeting
- Kristy Rizek [KDOT] stopped transcription