

NOTES - NETC ADVISORY COMMITTEE WEB CONFERENCE MEETING

DATE/TIME:	March 31, 2020 - 9:00am – 2:00pm ET
ACCESS INFO:	Web Meeting Link: Join the meeting
	Dial-In: 415-655-0001 (Access Code: 737 957 325)

ATTENDEES:

Edgardo Block, ConnDOT	Dale Peabody, MaineDOT				
Colin Franco, RIDOT	Ann Scholz, NHDOT				
Tanya Miller, VTrans	Kirsten Seeber, CTC & Associates				
Dee Nash, NHDOT	Maina Tran, CTC & Associates				
Lily Oliver, MassDOT	Christos Xenophontos, RIDOT				
Emily Parkany, VTrans	Nicholas Zavolas, MassDOT				

Financial Update – Dale Peabody

- \$1.6M transferred to date, plus ME's funds equal a total of \$1.9M available. Another \$100k from RI (2020) and \$200k from TPF-5(222), will make it \$2.2M available.
- Contracts = \$1.3M with \$435k expended. \$1.465M is the balance. \$855k in unobligated funds.
- Estimates
 - **19-3** Budget = \$200k
 - CTC = \$100k for amendment
 - ~ Dale We need to do a new contract with CTC & Associates.
 - Total to play with is \$666,368.08. Dale would like to stay around \$600k for the new projects.
 - Emily We have the \$200k coming back from TPF-5(222). Dale We can always have a contingency plan to start a project when the \$200k is transferred to ME.
- Still waiting for CT and RI's 2020 transfer.
 - Christos Send him a reminder email.
 - Ed CT transferred their funds early so the FFY2020 funds are there.
- Emily TPF-5(222) closeout. Each of the five states should be getting back around \$30k (\$200k total) plus travel funds for CT and RI.
 - Will the states transfer those funds to ME? Colin Let him know when it's coming so he can grab it before someone takes it. Christos Will need to get approvals at RI to send it to ME.
 - Emily She will try to let folks know when it is being transferred back to them. The Division Office and DC office must do their parts, so she won't know the exact date.
 - Christos Send the AC a separate email that explains that funds are coming back, and the AC decided to transfer them to ME for the current pooled fund. Action item: Emily will draft an email to the AC members that explains funds are being returned from TPF-5(222) and the AC decided to transfer them to ME for the current study. She will attach the spreadsheet to show what each state is getting back.

Ranking Process: 2020 Research Problem Statements – Ann Scholz

• The AC will first provide a yes or no for each project. If a project receives three yeses, it goes to the next round of discussion and rating. The rating provided by the states are added to determine the highest ranked projects based on those scores.

				СТ	MA	ME			VT		СТ	MA	ME	NH	RI	VT		
RPS #	Value	Length	Project Title	Y/ N	Y/ N	Y/ N	Y/ N	Y/ N	Y/ N	Total Yes	0-5	0-5	0-5	0-5	0-5	0-	Total Score	Decision
N20ME1	\$120k	-	In-Service Performance Evaluation of NETC Bridge Railings	Y	Y	Y	Y	Y	N	5	5	4.1	5	5	3	3.2	25.3	Fund
N20NH2	\$200k	24	Current Status of Transportation Data Analytics and A Pilot Case Study Using Artificial Intelligence (AI)	Y	Y	Y	Y	Y	Y	6	5	3.9	4	4	4	4	24.9	Fund
N20ME4	\$175k	24	Investigating Thermal Imaging Technologies and Unmanned Aerial Vehicles to Improve Bridge Inspections	Y	Y	Y	Y	Y	Y	6	5	4.2	5	3	3	4.25	24.45	Fund
N20MA3	\$100k		New England Connected and Automated Vehicle Legal and Regulatory Assessment	Y	Y	Y	Y	N	Y	5	5	4	4	5	1	4.75	23.75	Fund
N20NH1	\$45k	12 months	Creating a NETC that Works	Y	Y	N	Y	Y	N	4	5	4.4	0	5	5	3	22.4	Fund
N20MA1	\$200k		Network-Level Guardrail Inventory and Condition Evaluation Using Mobile LiDAR	Y	Y	N	N	Y	N	3	3							Not funded
N20MA2	\$200k		Leveraging Emerging Sensing Data for Horizontal Curve Safety Improvement	Y	Y	N	Y	Y	Y	5	3							Not funded
N20ME3	\$175k		Large-Scale Additive Manufacturing (3D Printing) for Enhanced Infrastructure	Y	Y	Y	N	Y	Y	5	3							Not funded
N20ME2	\$175k	24	Data and Information to Support Cost Effective Transportation GHG Mitigation in Rural Communities	Y	Y	Y	N	Y	Y	5	3							Not funded
N20NH3	\$150k- \$200k		Asphalt Mixture Laboratory Aging Protocol for New England	Y	Y	Y	N	Y	Y	5	3							Not funded

2020 NETC Research Problem Statements – Yes count for all projects/Scores for top five projects

Discussion

- Colin Lot of the projects have good ideas. In the future, if they can be changed a little, they can be used.
- Nicholas Identify projects to go forward first and then fine-tune them. Ann Would rather her TC member do the refinement.
- Top 4 projects = \$595,000.

N20ME1 - In-Service Performance Evaluation of NETC Bridge Railings - \$120,000

- Ed CT's bridge folks like this project.
- Lily MA's SME feels this project represents a current problem that needs addressing. MA doesn't know how their railings perform. The overall research schedule is aggressive in relation to the data needed to do the project.
- Dale This project is a follow up to NETC 18-1: Development of MASH Computer Simulated Steel Bridge Rail & Transition Details. The new project would confirm if the rail is performing the way it is intended, using in-service testing as FHWA wants.
- Ann The project would provide evidence of in-service performance to supplement computer simulations (NETC 18-1) and allow them to self-certify. Also, the PI should talk to the staff repairing the rails because the design staff don't always hear about accidents.

- Colin This is a great project if the PI can get the crash data. Is it possible to get adequate data? an NETC bridge rail inventory and the crash data? It's hard to get that data (from police or bridge maintenance folks). This project should be in two phases. If have there is enough good data, then the analysis should take please. He suggests \$40-50k for phase I.
 - Ann For NH, the crash data should come from the bridge maintenance folks because the police don't send data onto the DOT. The PIs would have to review the crash reports to see the type of accidents and if bridge rails were hit.
- Dale ME has crash data that is easily accessible and can review. The data is about how the rail performed. They are skeptical that they would get crash data on hits and what happened.
- He likes the phased approach with concentrating on gathering the data.
- Emily VT's crash data would not reference bridge rail system failure. The data part of this project is a question for them.
- Colin The analysis portion of the project is one month, which is too short.
- Ann Sounds like we need a phased approach. Dale Put a go/no go in the contract so if get to a certain point and don't have the data, then end the contract/project. Colin Data collection phase should be four months. (\$40-\$50k).
- Emily Need enthusiastic TC members. She does not know if VT folks would be that excited about this project.
- Ann This one will go forward but teased into a proposal that will address the things discussed above. Dale There will be an AC Liaison to keep an eye on the project and CTC will manage it to make sure the discussions here are considered by the TC.
- Emily Motion to approve for 2020 program. Second Ed.
- Action: Fund this project at \$120,000 including the caveats noted above. Dale will be the AC Liaison.

N20NH2 - Current Status of Transportation Data Analytics and A Pilot Case Study Using Artificial Intelligence (AI) - \$200,000

- Ed CT in favor of this project. Everyone is thinking about this topic. Anything with a case study will be valuable. Need to find out what not to do, vs what to do. Can get a lot of benefit with experimenting at this point.
 - There is an NCHRP project, with a similar scope, making its way through balloting. We need to collaborate with them and make sure the projects are not overlapping.
- Lily MA's SME feels this project is worth investing in. Is this something specific to New England or this being done at a higher level? States need to think carefully about how to implement this. The PI will need to access to the DOT data, how they are using AI now (or plan to), who manages it, and how the DOTs can improve their AI use.
- Dale No comments from ME folks.
- Ann This project came through their Traffic Center folks. It is implementable because filtering the data will allow them to help the TC manage traffic. Will help them reduce the amount of data that will come in from CAVs.
- Colin Great project but too far-fetched, with the AI and CAV aspects. That technology is about getting data from the vehicles and making decisions on how the vehicles move. The DOTs don't have a handle on that data yet, but they have a handle on the data they already collect in the DOTs (construction, design, planning, etc.). This project would be good to look at all data and then see which of the mega data sets AI could be applied to. That would be more realistic take on the project.
 - Colin Do DOTs have the expertise in-house that know about AI? Would they be on the project TC?

- Emily Similar to Colin, this project is valuable if the research focuses on the data they collect, why they collect the data they do, and do they make best use of the data they collect.
- Ed They are already getting folks coming to them with black box solutions for data they don't understand, and this will increase. They need to figure out what to buy (black box solutions) and what not to buy. Need to find out where the AI really can help.
- Dale Motion to approve for 2020 program. Second Ed.
- Action: Fund this project at \$200,000. The SOW should include reference to the NCHRP-related proposal.

N20ME4 - Investigating Thermal Imaging Technologies and Unmanned Aerial Vehicles to Improve Bridge Inspections - \$175,000

- Ed CT is interested in this project. They use handheld scanners (study with UConn). The next iteration would be to use them with unmanned vehicles. They have a UAV department/person so they could work on this or would be interested in this. Everyone talking about/using UAVs, so the timing is right.
- Colin This a specific use of UAVs (bridge inspections.) He thinks there is an Everyday Counts (EDC) that are studying/using UAVs.
 - Dale EDC promotes UAVs they are but not doing studies. There are no studies on infrared monitoring in combo with UAVs for bridge decks.
- Emily VT uses UAVs for emergency responses. Likes what Dale is saying about the thermal imaging. VT's SME wants more help and education in this area, which is why the support the project.
- Nicholas Alex Bardow says that UAVs will provide an extra dimension that they don't have with the inspection processes now. The problem statement needs to be tightened up a bit.
- Ann NH's bridge design folks reviewed the problem statement. They have done a couple UAV studies. The bridge design folks don't have a great understating of using UAVs for bridge inspection yet. They feel handheld scanners would work better. UAVs need special operators and would cause traffic disruptions. They feel they could implement favorable results. Also, feel that UAVs would help with under bridge inspections. Feels it would work better in higher density areas where there are overpasses.
 - Ann She does not know what the implementation of this project would be until NH folks accept using UAVs for bridge inspections overall. The project might bring their folks on board. They are in the process of purchasing a UAV and they have a consultant on call to fly them.
- Dale This has been done (handheld infrared thermal imaging for bridge decks) by other states and has been successful. Handheld will work for some bridges. Drones may use GPS connection under bridge decks and need operators who can fly under bridges. ME's bridge folks are not keen on drones except for this purpose. Could help determine if chunks of concrete are going to fall from under overpasses before they fall.
- Colin Would ME only try the infrared part of this project? RI's been using this for years. How would GPR fit into this project? Dale The TC would have to work this out. He tried to get the problem statement authors to focus the statement down more.
- Colin If only focusing on infrared, do they need \$175,000 for the project?
- Ann How many of the DOTs already have a UAV and operators?
 - MA has a lot. VT, RI, and ME have some.
 - Christos RI's are not used for research or as a forensic tool.
- Emily NETC 18-3 is trying to figure out how the states are using UAVs and guidelines for them. She is okay with the funding level because 24-month projects use a lot of money.

- Dale When start using UAVs, lots of data collected. What do you with the data once you have it? How is it used? How is it stored? Lily – Agrees with Dale's data comments. Can the data provide enough information to decide, (not just images) on what to do with the images?
- Ann Are states bridge inspectors currently using UAVs?
 - Colin RI is using them in construction to monitor traffic, for example. IT wants to use them for planning purposes.
 - Dale ME has had consultants use UAVs on bridge inspections, but more for demonstrations. They have the capability to do inspections with their UAVs.
 - Lily MA has used them to assist in bridge inspections. (Consultants use them).
 - Emily Used for rail bridge inspections. VT is interested in using UAVs for highway bridge inspections. They are interested in learning from research guidelines and expanding their use to bridge inspections.
- Nicholas Is their interest in seeing the project include identifying how a DOT can bring the UAV technology in-house, as opposed to subbing it out to a contractor? How many DOTs have in-house capabilities? Emily This the focus of NETC 18-3 project How to make it tangible (using UAVs) at the DOTs?
- Ann Will the end product be a guidance document that would be applicable to the New England states? The implementation section of the problem statement indicates the project will result in protocols for UAV-based inspections, including most appropriate imaging technologies, with focus on thermal imaging. Emily – NETC 18-3 - Bridge inspections is one of the six case studies that the project is investigating.
 - Dale None of the components of this project are being done in NETC 18-3, which is more of a desktop discussion as opposed to demonstrations of UAVs and infrared technology. NETC 18-3 is more about finding out where they do, and want to use, UAVs in the DOTs.
- Dale The consultant would have to already have the equipment for this project. This will be specified in the SOW.
 - The project will suggest the best equipment to use. Since states already have UAVs, the project should figure out how to use equipment with existing UAVs. The test trials should be with the existing equipment.
 - Emily This is a moving target because equipment changes all the time. Ann Is the length of the project appropriate for the changing technology? Could this project find out the UAVs the DOTs have and do test trials on them?
 - Nicholas The project is more about the camera and the sensitivity on the cameras mounted on the UAVs. What is the technology now and what can they do when inspecting bridges – visual only or more than that?
 - Lily <u>https://www.nature.com/articles/s41598-019-49336-1</u> See this publication. She feels the focus should be the IR data modeling to understand the bridge deck integrity. The project should be more about using the data to talk about the bridge integrity.
 - Dale From an equipment standpoint, the project would determine generic specs that would outline the necessary requirements needed for both the UAV and the inspection equipment. The project will not say that you must purchase specific equipment, but rather that the UAV should be capable of carrying a certain amount of weight, for example.
 - $\circ~$ Ann The TC should see the AC's comments on the project to help them as they craft the SOW.
- Colin Motion to approve for 2020 program. Second Christos.
- Action: Fund this project at \$175,000. The AC's comments will be shared with the TC during the SOW review process.

N20MA3 - New England Connected and Automated Vehicle Legal and Regulatory Assessment - \$100,000

- Emily Five states support this project. RI wants to know what other groups are doing and not duplicate that work.
 - Ed Will convey to their TC member that it would be important not to overlap with other groups.
 - Nicholas They are happy to make refinements to the project so that it gives NETC what it needs and stands apart from the other groups' work.
 - Christos This project could coordinate with the other groups, such as AAMVA. The project could bring all the regulators (DMVs for example) together, and not just DOTs. Emily – There may be mixed success getting DMVs involved on this project.
- The TC is already formed. The project is growing out of the NEV group that meets several times per year.
- Christos He will be the RI TC member.
- Emily She is involved with the previous NETC CAV project (17-1).
- Ann NH is enthusiastic about this project.
- Nicholas Depending on the final project, the NE Governor's Council may be interested in the results. It could help inform their decisions on their level.
- Lily <u>NCHRP Legal Research Digest 69</u> is about legal issues with driverless cars. The state and federal regulations section is short. This project could expand on the New England legal issues. Colin A literature search would be needed to guide the project in terms of what info is already out there.
- Dale Motion to approve for 2020 program. Second Ann.
- Action: Fund this project at \$100,000.

N20NH1 - Creating an NETC that Works - \$45,000

- Ann She drafted this project so to enhance the effort on the projects NETC selects, and to ensure the projects are implementable. A Symposium-type effort may be a better way to go with project selection. She feels there are other PFs that are more successful and have successful procedures that we NETC can use.
- Colin Feels this project is important to update and improve NETC. It has been about 20 years since the AC has reviewed their projects processes. It would be great if NETC could bring the research down to the shop floor, gathering a group with a mission and do research that can get procedures and processes out there. Figure out what NETC can really do – small research projects and getting the ideas out there.
- Christos He feels like the AC should be investing in themselves. He will add this topic to the upcoming RI peer exchange.
- Emily She is not convinced as this as a separate research project, but more a facilitated discussion amongst themselves. CTC could do some of this and/or investigate other consortiums to determine their best practices.
- Colin This will cost money if you are going to do it right. Going to other pooled funds is nice but NETC has a history. Do we need to be doing something different? The AC set aside money for this 10-12 years ago.
 - Dale They had a facilitator 10-12 years ago and did not end up making significant changes to help with implementation. If they are going to do this, need to be all in and talk about how they will implement this project.

- Nicholas Can we get a copy of the work the facilitator did? There is a questionnaire to help develop a list of what they want to do. Action item: Kirsten will look for the questionnaire and other related materials.
- Dale Is in favor of improving NETC and doing a project like this. He doesn't want this project to compete with their customers' money. Will likely have a surplus of \$200k with the transfer back of the TPF-5(222) funds. He proposes to set this aside for now. Continue discussions on what the project would be and use the \$200k later.
- Ann An additional research statement that she did not put forth is to develop a critical needs list for New England. Ask the secretaries/deputies what they want to research. Problem statements come from the universities so don't necessarily track with what the DOTs need. This project could generate a critical needs list for the next 5-10 year so they know what they should focus on.
- Emily The AC needs to figure out ways to implement this, a product they can use. Figure out what they want, transfer things they are doing without creating work for themselves. This does not need to be a separate research idea. There are other projects that need attention.
- Colin Lot of the research folks are involved in national, regional, local research efforts, pooled funds, etc. There is so much research already taking place around the country. Would it be better for NETC to be a facilitator of research results and getting them implemented in New England? Could NETC be looked at as the entity that brings the DOTs good ideas to implement, as opposed to conducting actual research? NETC is not doing much research. Is it adding value to NE? Focus on getting research into practice.
 - \circ Ed No reason they can't focus on the end of the road with research.
 - Emily Getting at state-by-state what they want. Each state can come up with their list of bullets of what they want NETC to do. Bring that to a conversation.
 - Christos Good question to pose as they approach this effort.
 - $\circ~$ Ann This is a topic that needs to be discussed more.
- Dale Motion to set aside \$50,000 for this effort. Second Christos.
- Action: Set aside \$50,000 to do this effort.
 - Carve time out at RI peer exchange to discuss further? NETC is an important part of their research programs. Dale – Not sure if logistically having the discussion at the RI peer exchange will work. Christos – The AC will find a dedicated opportunity to discuss.
 - Emily Will this be a separate project, or will CTC do it? Group TBD.
- The first four projects expend \$570,000. Additional \$50,000 for N20NH1. Total for all projects = \$620,000

Follow up Project to 15-1: Project Use of Forested Habitat Adjacent to Highways by Northern Long-Eared Bats – Rebecca Martin

- Rebecca She handles threatened and endangered species for the NHDOT.
- NETC 15-1 This project focused on how bats are using habitats around the highways. The Northern long-eared bat is listed as threatened, so projects need to be cleared. The project was supposed to build a model, but the researchers didn't have the data they needed.
- In 2016 a legal case was brought against the US Fish and Wildlife Service. Part 1 Challenge to listing the northern long-eared as endangered vs. threatened. Why not endangered? Part 2 4D rule Targets protection of the species, where they hibernate and where maternal colonies are. That allowed them to continue their work.

- Decision that came out on part 1 requires DOTs to look at current data, vs. the 2016 data. The bat is doing worse now, so they will have a hard time maintaining a threatened listing (and it will be move to endangered status). The process to collect the data will take a while. If/when the listing changes to endangered, the 4D rule goes out the window and it will be hard for the DOT to do their work (clearing habitat for construction projects would have to stop.) There is time to prepare for the new listing. This proposed project would get more data and build on the data collected in NETC 15-1.
- Does NETC want additional acoustic data to validate the model developed in NETC 15-1?
- Rebecca They have no idea when the judge might rule on part 2.
- Colin NETC 15-1 timeline and budget? 24 months and not sure about budget.
- Rebecca The project would conduct a perpendicular acoustic survey along highways. The project would be 24 months to allow for two survey seasons, which run from May to August.
- Rebecca They thought there was enough data already to fuel the model from NETC 15-1, but they did not. That is why they need to collect data in the blank spots identified during NETC 15-1. Not every spot needs to be covered, but there were too few detections of the northern long-eared bats and too many blank spots where no bats were detected.
- Christos Is this a new project or extension to the previous project? Rebecca It seems like a new project because they are collecting new acoustic data. Some other states have more robust data than the New England states because they have Indiana bats. Indiana bats have the same habitats as the northern long-eared bats and the other states conducted studies on the Indiana bats.
- Ann Implementation discussion of NETC 15-1. Did not seem like it was a problem for VT. Emily Her folks felt they were ahead of the game for NETC 15-1 and other bat projects. Rebecca – VT and NH use the FHWA programmatic agreement, but it still relies on the northern long-eared bat being at threatened status. If listing changes to endangered, the agreement would be modified. But construction projects would have to stop until it gets worked out.
- Rebecca MA and ME depends heavily on the 4D rule. CT depends on it too. NH Some construction projects use 4D rule and others use FHWA Programmatic Rule.
- Ann Table this until off-cycle projects talked about later today. Then can let Rebecca know if we will accept this off-cycle.

Timeline for 2020 RFPs – Kirsten Seeber

- The AC members will tell their folks the status of the projects Funded, will be discussed, or not funded.
 - Action item: Kirsten will create a list that shows status of the projects and send to the AC.
- April Technical Committees formed to develop Scopes of Work. Can we do this by 4/15/20? Due date = April 15.
 - \circ $\;$ Need to identify TC members. The TC chair signed the RNS.
 - Action item: Kirsten to send email reminder to the AC asking them for their TC members for each funded project. Make sure the TC chair will chair the project. List the chair in the email to the AC members.
- Lily For the AI project (N20NH2), what functional area do they draw the TC from? AC needs to agree the focus area of the project and draw TC members from there. Ann Traffic management centers. Related to traffic management center or traffic analysis folks.
- CTC will create the first draft of the SOWs, using the problem statements as the basis. CTC will send the draft SOW to the TC chair and AC Liaison to review and revise. The AC Liaison will pay attention to the implementation section of the SOW. The revised SOW will be the basis for the SOW meeting with the TC.

- Convene the TCs to finalize the SOW.
- SOW distributed to the AC while Kim is doing her RFP work. If there are significant changes to the SOW, then it will slow down the process. Will go back to the TC for review. The AC review will be looking at implementation specifically.
 - If an AC wants to see a draft SOW, Kirsten will send it to them. AC members can work with their TC member on the SOW. We don't want to hold up the process. Emily – Send the draft SOW to the AC members, as a heads up, a few days before goes to ME for RFP posting.
- August ME will review the Scopes of Work and issues RFPs.
- October Deadline for receipt of Proposals. Kim distributes proposals to TCs for evaluation and recommendation of award.
- January AC to approve funding for changes in budget and scope of research projects.
- January March Research project agreements executed, and projects start.
 - Emily Projects will not start until March? Dale Will try to get them started ASAP. Emily CAV folks want to get started ASAP.

Accepting Off-Cycle Research Projects/Asking for Projects that Fit NETC's Needs – Ann Scholz/Dale Peabody

- Ann NCHRP and NETC project ballots were sent at the same time and caused confusion among staff. Not sure why NETC is on NCHRP solicitation schedule. Should NETC switch to a different solicitation schedule to avoid confusion and get better/more feedback?
- Ann Is NETC willing to accept off-cycle projects? Nicholas Why would we need to accept off-cycle projects?
 - o Christos Difference between late problem statement submittals and off-cycle projects?
 - Off-cycle projects should be initiated by NETC, when an AC DOT member (not a university) asks for a project be considered off-cycle. The project should be urgent.
 - Dale There may be funds that can be used on off-cycle projects.
 - Ann Keep it under wraps in their departments but let executive offices know there is an opportunity for an off-cycle project. There would be no email blast to the mailing list for a research problem statement.
 - Kirsten What is the difference between QRP and an off-cycle project? Ann This is more about accepting a full-blown research project, but they wouldn't need to wait until the solicitation comes around. It would be contingent on if the funding is available.
- Ann Do we do this via a motion or policy change?
 - Ann Motion to develop a process for off-cycle, urgent requests, authored by DOTs. Use of that will be contingent on available funding. Christos – Second. Wants to see a process. Approved!
 - Action item: CTC to write the process for off-cycle projects? This was not determined at the meeting.

Adding items to the CTC contract to address NEMTEM (formerly NEMREM) and other potential SME meetings – Dale Peabody

• CTC could support one to three NEMREM-type meetings of SMEs. The task is already in the CTC contract but paying for the facilities/food. Dale wants to add this to the new CTC contract.

- Ann Put some financial backing in the CTC contract, then CTC could pay for the venues and meals and be reimbursed by ME. Latest NEMREM meeting less than \$2k. The SME would put together an agenda and gather materials. CTC would not do this.
- Lily She likes the the idea of NETC providing this kind of support. Have folks apply for NETC support and provide information on the state leading the meeting, where the meeting will be held, topics to be addressed, etc.
- Emily Their STIC group recently completed a peer exchange application. Action item: She will look to see if use/modify that form. Ann Put a form on the NETC website. Could be a rolling application process. Fund three or so during a calendar or FFY year.
- Kirsten What would CTC's involvement be? Dale CTC would not have to be on site but set up the logistics (meeting facilities/food) prior to the meeting. The lead state would take be responsible for notes. AC members would attend to get an idea of the value the meetings. Wants the lead DOT to take initiative on the meetings.
- Ann NEMTEM wants to keep meeting but the funding was the issue.
- Dale AC group comfy adding \$10k to the next CTC contract to cover facilities/food for SMEs.
- Dale Motion to add \$10k to the next CTC contract to cover facilities/meals for SME meetings. Christos. Approved!

Project # and Title	PI, University AC Liaison	Update	End Date Budget 6/1/20 \$199,936	
<u>18-1: Development of MASH</u> <u>Computer Simulated Steel</u> <u>Bridge Rail & Transition Details</u>	Chuck Plaxico, Malcom Ray, Roadsafe LLC D. Peabody	PI sent the revised draft final report and a doc explaining how he addressed the TC's comments. This is with the TC chair for review. The PI is working on the fact sheet and poster. CTC will schedule a webinar for the project.		
<u>18-2: Framework of Asphalt</u> <u>Balanced Mix Design for NE</u> <u>Agencies</u>	Walaa Mogawer, UMass Dartmouth A. Scholz	Tasks 3- 5 are in progress. PI requested a contract extension due to delayed project start. ME is working on an amendment to extend the contract from 6/30/20 to 12/31/20. Research team is in process of gathering historical pavement distress data from NE states for Task 3.	6/30/20 \$127,499	
<u>18-3: Integration of Unmanned</u> <u>Aircraft Systems into State DOTs</u>	Jon Gustafson, WSP E. Parkany	Task 3 is in progress. A progress meeting was held on 1/14/20. March 6 was John Gustafson's last day. He is replaced as the PI by Adrienne Lindgren, who was already on the Technical Committee.	3/31/2021 \$146,632	
<u>19-1: Curved Integral Abutment</u> Bridge Design	Adam Stockin, WSP E. Parkany	The kick-off meeting was held 3/13/20. The TC decided on the parameters they want included in the simplified bridge model. The research team is revising the scope and project costs. Also looking at how much instrumenting/ monitoring a bridge would cost – additional project costs/phase II, etc.	6/30/22 \$150,000	
<u>19-2: Multi-Scale Multi-Season</u> <u>Land-Based Erosion Modeling</u> <u>and Monitoring for</u> <u>Infrastructure Management</u>	Aimee Mountain, GZA A. Scholz	The contract with GZA is fully executed. The kick-off meeting was held on 3/5/20. Task 1 is in progress. A survey to collect state land data was sent out mid-March. A Rhode Island DOT rep has been assigned to the TC: Colin Franco.	6/30/22 \$150,000	

Open Projects (March 2020) - Kirsten Seeber

Project # and Title	PI, University AC Liaison	Update	End Date Budget
<u>19-3: Experimental Validation of</u> <u>New Improved Load Rating</u> <u>Procedures for Deteriorated</u> <u>Steel Beam Ends</u>	TBD N. Zavolas	RFP posted. Responses due 4/8/20. No questions came in.	TBD \$200,000

Discussion:

- Kirsten Is the closeout webinar, referenced in the SOW, now the same as the webinars we've been holding for anyone to join or are there two?
 - TC closeout webinars Longer webinar for the committee only. There will be more interaction. Public webinars are shorter.
 - Dale It may depend on the project, but it needs to be clear in the project contract. For some projects, there may be two webinars. In most cases the draft final report meeting is the closeout webinar. Emily Prefers a 30-minute public webinar.
 - The NETC 18-1 TC probably does not need a closeout webinar but ask them.
- Projects 19-2 and 19-3 need TC members from RI.

RI Peer Exchange – Christos Xenophontos

- Members to check calendars for when to hold the RI Research peer exchange.
- As soon as folks can travel, they will schedule the peer exchange. Funding is set aside and the contract with Volpe has been signed.
- The peer exchange will be two days, in RI and during the summer, if possible.
- RI is getting support back again for their research program.

Website Refresh – Kirsten Seeber

• Not enough time.

Next meeting 4/28/20 from 11:00am – noon ET.