FY 2025 SHA Research Needs

Response to Administrative & Technical Questions

Updated 2/28/2025

Administrative Questions:

Question A1: *Is there a budget limit for proposals?*

Answer: No. However, cost will be factor in the proposal selection process. Most projects selected for funding are $150K – $175K. If a research need requires a long study period and/or a large scope-of-work, it may be justifiable to include a budget above this range.

Question A2: *Will SHA select only one proposal for each research topic or multiple?*

Answer: In general only one proposal will be selected for each research topic. However, in cases where it is deemed to be advantageous to SHA to pursue more than one proposed research plan, multiple selections may occur. That will not be determined until the proposal review phase and will also depend on funding availability.

Question A3: *Can a researcher submit multiple proposals for one research topic?*

Answer: No. Researchers may submit a proposal for more than one research topic but should not submit multiple proposals for the same topic.

Question A4: *Can proposals include a Co-PI or should the Co-PI be listed as part of the Research Team?*

Answer: Yes. While SHA only accepts proposal with one principal investigator, a Co-PI is acceptable if 1.) their percentage of time is <u>significantly less</u> than the PI; 2.) their contribution to the project is meaningful and clear in the proposal; and 3.) the PI agrees to maintain project oversight and accepts responsibility for all work being delivered. Please also list the Co-PI as a member of the Research Team.

Question A5: *Is a team composed of two universities and a consultant admissible? Does the PI need to carry out at least 50% of the work?*

Answer: Yes, this is allowable. Should the proposal be selected, SHA would issue the notice-to-proceed to the PI. The 2nd university and consultant

would both be subs to the PI and therefore, limited to no more than 50% of the direct costs on the proposed budget.

Question A6: *How long is the study period for SHA research projects?*

Answer: Unless otherwise specified in the RFP, the study period for the research is flexible and should be based on the scope-of-work proposed. However, a 12-18 month time frame is generally desirable.

Question A7: *Are there restrictions for font size and page margins?*

Answer: No, there is no restriction on font size or page margins. SHA accepts proposals that communicate a straightforward and professional image.

Question A8: *Does the proposal need to be routed through the university's research administration office?*

Answer: When responding to an RFP, a proposal is not required to be routed through the research administration office. After being selected, the final proposal would have to be routed through the research administration office. PIs should always check with their individual universities for their specific policy.

Question A9: *Is an appendix allowed and will it count towards the page count?*

Answer: Yes to both. An appendix can be included and it will count towards the ten page limit.

Question A10: *Would a full-time faculty who is not on a tenure-track qualify as a PI?*

Answer: Yes, a research professor not on tenure-track qualifies, assuming he/she has the right expertise.

Question A11: *What is the appropriate indirect cost rate?*

Answer: The indirect cost rate is determined by the agreement between SHA and state universities. For example, the indirect cost rate is 26% for the University of Maryland, College Park, and Morgan State University. Please check with your university's office of sponsored research if additional information is needed.

Question A12: *Is there a limit for labor expenses in the budget?*

Answer: Please see QuestionA1 for answer on the total budget. SHA does not have a limit on labor expenses.

Question A13: *When budgeting for a subcontractor, can we include salary in it? Is there a limit on percentage?*

Answer: Yes, you can include a subcontractor and salary. Their role should be clearly identified in the proposal. Should a subcontractor be included, the PI must complete at least 50% of the work (i.e. direct costs) You can find more information on Page 7 of the [Guidelines for Proposals](#).

Question A14: *Will one proposal be definitely selected for each RFP topic? Is it possible that all proposals for a topic are rejected?*

Answer: At SHA, we assess each proposal submitted for the best fit for our objectives and outcomes. we will strive to select one proposal for each RFP topic; however, yes, it is possible that all proposals for a given topic may be rejected. If all proposals are evaluated and rejected as not meeting the research need, SHA reserves the right to:

- · revise the research need to clarify the expected outcomes/deliverables,
- · reduce the expected outcomes/deliverables,
- · readvertise the research need in a separate RFP, and/or
- · delete the research need from the available projects.

It is our expectation that all research needs will have a proposal that fits.

Question A15: *Can a consulting company, not a university employee, be the lead of a proposal?*

Answer: No, a consulting company may not be the lead on a proposal submitted through the university. A consultant company may be a subcontractor or Co-PI, but their percentage of the work must be significantly less than the PI and is limited to no more than 50% of the direct costs on the proposed budget.

Question A16: *The [Guidelines for Proposals](#) document indicates that proposals may be delivered as an emailed PDF file using the email address research@mdot.maryland.gov. Can PIs hand deliver proposals?*

Answer: *No.* The proposer is required to submit electronically, it must be 10-pages and received with the electronic date/time stamp before the deadline. If it is electronically date/time stamped outside of the deadline, the proposal will not be accepted.

Question A17: *What is the maximum cap for each budget that can be requested for each RFP?*

Answer: Please refer to the response in Administrative Question #1. In general, cost is one of the factors in the proposal decision, selection, and award process. Most projects selected for funding are between $150K – $175K. If a research need requires a long study period and/or a large scope-of-work, it may be justifiable to include a budget above this range.

Technical Questions:

General Question#1	*For research that requires field work, if a research team has candidate sites in mind, is there a viable mechanism to confirm suitability and/or access to these sites for our research plan with an representative?*
Answer	MDOT SHA recommends including the suggested candidate sites in the proposal and adding a statement that the locations are subject to change pending input and approval from MDOT SHA. Once proposals are selected there will be an opportunity to discuss and finalize the scope-of-work (including details like field sites) with technical staff.

RFP #01: The Influence of Rubber Modified Asphalt on Pavements Performance

Question #1:	Regarding the deliverable 1, does SHA interest lie in a lab-experiment based data driven description or a field-experiment based data? We are of the opinion that a field-test based data driven description requires a longer timeline and development of testbeds. Is the SHA capable of a separate budget for this type of approach?
Answer:	Yes, SHA's interest lies in field-experiment based data. Although, we anticipate lab testing will also be necessary. SHA is capable of a separate budget for this type of approach. SHA intends to use planned system preservation projects as pilot projects as the basis for field experimentation.

RFP #02: Designing the Low Carbon Asphalt Mixtures and Monitor Performance in the Field

Question #1:	Regarding Objective 3 in RFP, recently the FHWA climate challenge program information has been taken down. Does objective 3 need to be re-addressed or removed.
Answer:	FHWA climate challenge website is currently inaccessible. Despite this setback, we can still provide guidance on what is expected in terms of FHWA Climate Challenge guidelines based on our proposal for LCTM.. It is our belief that the program is temporarily paused rather than eliminated. Since this research doesn't commence until October of this year, we remain optimistic

that the program will be reinstated by that time.

In the meantime, we intend to proceed with Objective 3 as planned. Should we need to remove it later, we will ensure to inform the contractor accordingly.

RFP #03: Virtual Weigh System (VWS) Current State of Practice and Technology

Question: No questions received

Answer:

RFP #04: Establish an Administration-Wide Data Science Program at SHA

Question: No questions received
Answer:

RFP #05: Traveler Information for Rural Maryland

Question: No questions received
Answer:

RFP #06: Assessment of Litter Hot Spot Areas for Targeted Reduction in Prince George's County

Question #1: The specific requirements mention 'Litter Dashboard' and 'Illegal dumping locations and problem areas.' Are these web-based tools? If so, could you provide links to them?

Answer #1: The 'Litter Dashboard' (known as the Litter Pickup Program) is a web based tool which identifies litter hotspots in Maryland. The application is a transparent method of sharing the State Highway's (SHA) litter pickup planning and progress along its state-maintained roadways. The dashboard can be accessed here:
https://maryland.maps.arcgis.com/apps/dashboards/a9bd51cbe9924035 87d3592731f2dfc3

Question #2: What does 'review having dump days in prominent areas' refer to?

Answer #2: Research the possibility of where the County's landfill facilities had extended hours or locations to allow community access for dumping items that are commonly dumped illegally.

Question #3: What specific data sources are currently (or will be) available in Prince George's County or Maryland DOT-SHA for identifying litter hotspots at the census tract level?

Answer #3: The Litter Dashboard, CCMS (Customer Care Management System) tickets and eTAC (Electronic Team Activity Card) reports, which are reports related to State maintenance activities.

Question #4: How will the team access the Litter Dashboard?

Answer #4: The team will submit a request for Access to SHA Online ARCGIS.

Question #5: Will the research team have access to MDOT SHA's spending data to analyze cost trends?

Answer #5: Yes, through eTAC.

Question #6: Are there preferred methodologies for identifying litter hot spots?

Answer #6: The Litter Dashboard, CCMS, and eTAC.

Question #7: Beyond the Operation Clean Sweep effort launched in February 2023, has Prince George's County implemented any additional initiatives, policies, or enforcement strategies that differ from other counties in Maryland?

Answer #7: Prince George's County has a Residential Street Sweeping program, Growing Green with Pride events, Bigbelly receptacles, and hidden cameras to catch illegal dumping.

Question #8: Are there any ongoing or planned efforts by Maryland DOT-SHA related to litter issues that the proposal team should be aware of?

Answer #8: No

Question #9: What level of engagement is expected with Prince George's County DPW&T?

Answer #9: The expectation is quarterly coordination with Prince George's County DPW&T.

Question #10: Are there specific environmental or equity-based metrics that should be emphasized in the analysis?

Answer #10: Identifying areas (Census tracts) disproportionately impacted by litter.

Question #11: Additionally, if there are any further details Maryland DOT-SHA can provide beyond the deliverables outlined in the RFP to help us better understand the expectations and the goals of the project, that would be greatly appreciated.

Answer #11: All details are outlined in the Request for Proposals.

Question #12: Could SHA provide more details on the existing data from the Litter Dashboard and other sources? Specifically, what data points are available, how frequently is the data updated, and in what format is it available?

Answer #12: The Litter Dashboard is updated on a regular basis. eTAC is updated daily.

Question #13: What are the expectations for community engagement strategies? Are there specific goals or metrics the county aims to achieve with these initiatives? Are there existing community engagement programs that our project should align with or build upon?

Answer #13: The project should provide guidance as to where we should aim our community engagement strategies.

Question #14: What level of involvement is expected from the Prince George's County Department of Public Works and Transportation (DPWT) in our project? How will communication and coordination between our research team and the department be facilitated?

Answer #14: The expectation is quarterly coordination with Prince George's County DPW&T. The County would assign a point of contact for communication and coordination

Question #15: Could you elaborate on the proposal/research team requirements and evaluation criteria? Has there been any relevant project in the past supported by SHA that you plan to extend in this round?

Answer #15: There has only been one recent project completed around Litter research. The final report entitled "Roadside Litter Control: A Survey of Programs and Practice" can be found on our website at the link: Roadside Litter Control: A Survey of Programs and Practice

Question #16: What is the budget limit for this project? Are there any limitations on the number of team members?

Answer #16: Please refer to Administrative Question #1. The budget for any Project should be sufficient to cover the research activities and research staff necessary to perform and complete the research.

Question #17: What specific resources or support will be provided by SHA and/or DPWT?

Answer #17: Guidance from subject matter experts and access to available data sources.

RFP #07: **Improving Internal Communication with SHA Employees**

Question #1: Would SHA provide information on "How is SHA communicating internally with office staff and those in the field, many without regular access to work phones and computers".

Answer #1: SHA Office of Communications (OC) communicates the same way with office and field staff: blast emails, wall-mounted message boards, postings on the SHA Intranet. OC has no dedicated channel of communications with field workers.

Question #2: Will the organization provide detailed information on the current communication channels, technologies and approaches used to reach all employees?

Answer #2: We can give researchers access to these channels.

Question #3: Considering that SHA has different divisions, like SHA bridges, traffic and safety, etc., do the means of communications differ from one department to another? Is the research expected to be done and generalized for the entire SHA organization or a specific division since the means of communications might differ from one to another?

Answer #3: SHA divisions indeed communicate individually with other divisions and the organization as a whole. The research should only tangentially comment on these more limited communications.

Question #4: Are state-issued cell phones assigned to frontline workers or any other digital solutions? What IT policies or security requirements must be considered when implementing a mobile communication solution?

Answer #4: State-issued cell phones are not issued to frontline workers. Only management receive them. Preliminary research shows that some frontline workers might be willing to use their personal phones to connect occasionally using QR codes. Generally, they have expressed unwillingness to load state applications to their personal phones.

Question #5: Would MDOT SHA be open to testing third-party communication solutions before developing a custom platform? What level of customization would be required for a mobile app to meet MDOT SHA's needs? Can we coordinate with field employees to conduct user experience testing and gather feedback? In case there is a need for developing a more feasible, user friendly means of communication.

Answer #5: The Office of Communications will ask the Office of Information Technology for permission to test third-party solutions. When a vendor is already approved to work with the State of Maryland, these solutions are more easily considered. The level of customization should be evaluated during the research phase. SHA will coordinate with the selected research team to contact field employees.

Question #6: Will the organization provide a comprehensive list of email addresses of employees for distributing the survey? If direct access to email addresses is not possible, could the organization facilitate the distribution of the survey through internal newsletters, intranet, or other communication channels? Are there any particular requirements for the design of the survey such as length of the survey, question types etc.

Answer #6: SHA will work with the organization to find the most effective way to distribute emails. But it is important to remember that this research is being requested because field staff rarely use email, and responses will therefore be skewed. In the past SHA has done limited face-to-face distribution of paper surveys by OC personnel, supervisors, and other researchers. It's recommended that to encourage a high response rate, surveys to field staff be short, with as few open-ended questions as possible.

Question #7: Can the organization assist in scheduling video and voice recorded interviews with a diverse group of employees, including both office staff and field personnel? We would like to conduct sentiment analysis to find the communication style preferred by the employees and for which we might need to analyze the recorded images and videos, if this is allowed.

Answer #7: OC will assist in scheduling video and voice interviews.

Question #8: Is there a possibility of forming focus groups from the employee base with the organization's help? If so, how might the organization support in forming these groups? Can we have access to the organizational chart?

Answer #8: OC encourages the use of focus groups. Organizational charts are available. It's recommended that researchers conduct focus groups in various regions of the state to account for regional differences in responses.

Question #9: Can the organization provide case studies, internal reports, or access to previous surveys related to internal communications? Are there documented communication breakdown incidents that have impacted operations?

Answer #9: OC can provide data and results of a 2023 survey of field personnel. OPR can provide results from a similar study, conducted in 2025, related to reaching field staff about training. There are anecdotal reports about comms breakdowns. For example, viewing of town halls broadcasts by the administrator are often skewed to headquarters staff.

Question #10: What metrics do MDOT SHA currently use to assess communication effectiveness? What are the evaluation criteria?

Answer #10: SHA currently has limited metrics: analytics from blast emails and limited analytics from Intranet pages.

Question #11: What is the process for gaining approval to conduct this research (survey, interviews, work with focus groups, developing an app and testing it) within the organization? Are there specific protocols or ethical guidelines we need to follow?

Answer #11: The Office of Communications will secure approvals, if needed, and ask the ethics coordinator if there are issues.

Question #12: Who will be our main point of contact within the organization for coordinating the research activities?

Answer #12: This information will be shared when the best fit research proposal is selected.

Question #13: What level of IT and managerial support can MDOT SHA provide for this project?

Answer #13: The Office of Communications will work with other departments to obtain managerial support. OC will also request help from the IT office.

Question #14: Is there any other support the organization can provide to aid in the successful completion of this research?

Answer #14: The Office of Communications will work with other departments to obtain managerial support. OC will also request help from the IT office.