RESEARCH REQUEST FOR PROPOSALS (RRFP) 25-01, 25-02, AND 25-03

QUESTIONS: The Tollway has received the following questions to RRFP 25-01, 25-02, and 25-03 via the research@getipass.com mailbox. The Tollway offers the following responses:

Question 1: It is our assumption that the 2D/3D images will be used for identifying surface distresses but doesn't include IRI, rutting, or faulting. Is this correct?

Answer: The Tollway typically captures 2D/3D pavement condition data with LCMS (or similar) equipment. Therefore, the Tollway has data for IRI, rutting, and faulting, and makes pavement maintenance decisions using these data.

Question 2: Does Tollway have access to the Laser Crack Measurement System which the research team can use for this study? Or Tollway expects the research team to bring their own equipment for data collection?

Answer: The Tollway typically captures 2D/3D pavement condition data with LCMS (or similar) equipment and can provide the FIS files and/or processed pavement view images. The research team can access LCMS scan data from 2024 and 2025. The research team is free to use their own equipment as well.

Question 3: Does the selection of pavement sections be based off the research team's discretion or Tollway has already identified the pavement sections that need to be studied?

Answer: It will be the research team's discretion, with approval from the technical review panel. Additionally, the Tollway captures pavement data on all mainline lanes every year. The research team can access LCMS scan data from 2024 and 2025.

Question 4: To support the image library development, would the Tollway be able to provide access to various segments of the pavement network representing different surface types, ages, and conditions for image capture using LCMS or similar systems?

Answer: The Tollway can provide a list of surface types and ages for the entire system. The Tollway will be able to provide traffic control or lane closure assistance on a few occasions. If traffic control or lane closure needs will likely exceed that, then those costs should be factored into the project cost.

Question 5: Would the Tollway be able to assist with traffic control or lane closures at specific sites, if needed, during the pavement image capture process?

Answer: The Tollway will be able to provide assistance on a few occasions. If traffic control or lane closure needs will likely exceed that, then those costs should be factored into the project cost.

Question 6: What is the expected resolution, capture rate for the 2D/3D images?

Answer: The Tollway currently captures LCMS-based pavement view imagery using LCMS-2. If the research team will capture their own data, the resolution should be sufficient enough to reliably, repeatedly, consistently, and accurately identify the needed pavement distress and condition data.

Question 7: Are there constraints or requirements on storage, access, and retrieval for the image library?

Answer: The Tollway can discuss this further with the selected research team.

Question 8: What distress assessment standards are prioritized: ASTM, IL CRS, or custom?

Answer: IL CRS

Question 9: Is explainability or model interpretability a desired feature?

Answer: It is desired but not mandatory.

Question 10: What platform or architecture is preferred for model deployment (cloud, on-prem, edge)?

Answer: Cloud

Question 11: Should the software tool include a GUI or API-only interface?

Answer: The Tollway will entertain both options; however, the Tollway is looking for a readily implementable deliverable.

Question 12: Will the tool be used in real-time, near real-time, or batch-processing scenarios?

Answer: The Tollway will consider all options. Past processes were batch-processing based.

Question 13: Would it be acceptable to utilize rgb imagery or just laser imagery?

Answer: The Tollway will consider all options.

Question 14: To support model validation, can the Tollway help identify representative test sites with known pavement histories (e.g., rehabilitation dates, previous condition scores) to ground-truth AI model predictions?

Answer: Yes

Question 15: For the Laser Crack Measurement System (LCMS), does Illinois Tollway uses its in-house LCMS for road scan or contract it to service provider? What brand of LCMS are used currently? How are the current data stored? (i.e., Local storage or cloud storage service)?

Answer: The Tollway currently contracts data collection service through a vendor, and uses the LCMS-2 system. Current data is stored on Microsoft Azure cloud.

Question 16: The research team will be provided with access to historical LCMS scan data for the purpose of this research. Is this correct?

Answer: The research team can access LCMS scan data from 2024 and 2025.

Question 17: Will the research team be expected to conduct additional LCMS scan?

Answer: The research team can collect additional data if they wish to and if it is needed to implement their research plan.

Question 18: The RFP indicates 'Pavement condition assessment maybe based on existing ASTM standards, the Illinois DOT CRS methodology, or a newly developed metric (upon approval by the IL Tollway).' Will the newly developed metric be available to the research team? Are there preference to the three alternative condition assessment metrics (ASTM, Illinois DOT, or IL Tollway methods?

Answer: The newly developed metric refers to any metric that may be developed as part of this research project.

Question 19: In the Itemized budget, the RFP states 'Provide an itemized budget for each of the Phases of the project and for the entire project, including the cost of personnel, consultants, subcontracts, equipment, materials, travel, overhead/indirect costs and **cost share** (match). Is cost share required of this RFP or it is optional? Will providing cost share be viewed favorably?

Answer: Cost share is optional. It is typically viewed favorably.

Question 20: Can you describe the proposal review and decision process?

Answer: The Tollway's research program uses a two-tier committee system to review, vote, and select research proposals.

Question 21: Can Tollway provide access to locations that may be selected as a part of the study to collect water samples?

Answer: Yes, all of the Tollway's drainage system is mapped within an ArcGIS Online Asset Management system that can be used by the Research Group to identify outfall locations downstream of erosion control blanket and away from the roadway.

Question 22: Are there designated easements or access points the research team can use to safely reach streams adjacent to erosion control installations without disrupting ongoing Tollway operations?

Answer: Yes, the Tollway can assist the team in selecting which outfalls or sampling locations would be ideal for the project as well as easily accessible. The Tollway has a total of 71 locations of storm sewer outfalls across 12 Counties and there will be 12-15 project locations placing erosion control blanket which could be evaluated depending on the timing of the project. As an example, the Agency typically targets 10 outfalls per year for water quality sampling.

Question 23: Would it be possible to coordinate with Tollway maintenance crews to identify areas where erosion control blankets are scheduled for replacement, so comparative sampling of aged versus new materials can be planned?

Answer: Yes, the Tollway's Environmental Unit staff, Research Point of Contact, and Maintenance Department will be able to provide assistance as needed.

Question 24: Would it be possible for the office to assist by clearing a pathway to allow the research team to safely reach the stream and collect samples?

Answer: Yes, the Tollway has resources to get vegetation cut, sprayed, or cleared if needed and access pathways can be coordinated.

Question 25: Are there any environmental monitoring stations or water sampling points already in place along the Tollway that the research team could access to avoid duplicating efforts?

Answer: Yes, the Tollway can provide past outfall sampling data, locations, and reports. However, previous sampling efforts were for typical parameters such as TSS, nutrients, metals, and chlorides. No microplastic, PFAS, nor CEC sampling has been conducted yet.

Question 26: Would Tollway be able to support the installation of field sensors (e.g., sediment traps, water quality probes) at selected sites to monitor long-term release of microplastics?

Answer: Yes, the Tollway is able to provide support for such efforts.

Question 27: For sites where sample collection requires entering or traversing waterways, would the Illinois Tollway be able to provide support in the form of equipment such as canoes, boats, or other safe means of water access to help the research team deploy monitoring equipment and collect samples effectively?

Answer: It would not be ideal to select locations where entering the water is needed. However, if it is determined that such equipment is necessary, the Tollway suggests that the Research Team include the price for rental or purchase within the project cost.