



REQUEST FOR PROPOSAL (RFP)

RUNWAY WEATHER INFORMATION SYSTEM (RWIS)

Introduction

The Metropolitan Airport Authority of Rock Island County, IL (MAA), which owns and operates the Quad Cities International Airport (QCIA), is seeking proposals from qualified vendors to provide a Runway Weather Information System (RWIS) for monitoring of runway surface and atmospheric conditions.

The RWIS currently in place at QCIA consists of in-pavement sensors installed on Runways 9/27, 13/31, and 5/23, as well as atmospheric sensors located at main control stations for the collection of precipitation, wind, temperature, and dew point data. Originally installed in 2011, the existing system is now experiencing sensor failures and inaccuracies, impacting the reliability of collected data. Furthermore, the system is no longer repairable due to the discontinued nature of the parts used in its original installation.

Given the critical role of The RWIS in ensuring safe airport operations during inclement weather, QCIA seeks to procure a state-of-the-art platform that utilizes the latest technological advancements to meet the evolving needs of the Authority.

Scope Of Work

The selected vendor shall provide a turnkey RWIS solution that includes system design, hardware procurement, installation, commissioning, training, and warranty/maintenance of parts. The scope of work shall include but not be limited to:

- **System Design:** Vendor must provide a comprehensive system architecture design, ensuring full coverage of airport runways.
- **Hardware and Software Procurement:** The vendor shall supply all necessary pavement and atmospheric sensors, master/secondary station components, and software/cloud licensing required for system operation.
- **Installation Services:** The vendor is responsible for installation of all system components, including mounting, calibration, and integration with existing airport infrastructure.
- **Demolition and Disposal of Existing System:** The vendor shall be responsible for the safe removal and environmentally responsible disposal of outdated RWIS components.
- **System Integration:** The new RWIS must be capable of integrating with existing airport systems via an API.
- **Testing and Commissioning:** Upon installation, the vendor must conduct system testing, calibration, and validation to ensure proper functionality before final acceptance.

- **Training and Documentation:** The vendor must provide training for airport personnel, including system operation/administration, troubleshooting, and routine maintenance procedures. Full documentation must be provided.
- **Ongoing Support and Maintenance:** The vendor must provide options for a maintenance and support plan for inspections, software updates, warranties, and troubleshooting services.

System Requirements

Sensor Network

The RWIS shall include, but not be limited to, the following sensors:

- Pavement Sensors (Installed at designated runway locations)
 - Pavement Temperature Sensor
 - Pavement Condition Sensor (dry, wet, ice, snow, frost, etc)
 - Depth of Water/Ice Layer Sensor
 - Friction measurement Capability (optional)
 - Base/sub-surface temperature probes
- Atmospheric Sensors (located at master collection stations)
 - Air Temperature and Dewpoint Sensor
 - Windspeed and Direction Sensor
 - Visibility and Precipitation Type/Intensity Sensor
 - Barometric Pressure Sensor
 - Remote Camera for visual condition observation (optional)

Master Station/Cloud Platform Requirements

The RWIS shall include a master control interface on the cloud that:

- Collects, processes, and displays real-time data from all sensors
- Has a user-friendly interface accessible via desktop and mobile devices
- Multi-year storage of historically recorded data accessible via table and graph interfaces
- Provides automated alerts for critical conditions (eg icing potential, low temperatures, and other user definable alerts)
- API capabilities for integration with airport systems
- Collection and importation of old system data.

Sensor Locations

Vendors should utilize existing sensor locations and cable pathways (but not existing cable) currently installed at the following locations:

- 27 Touchdown Zone
- 27 Midpoint
- 9 Touchdown Zone
- 9 Midpoint
- 13 Touchdown Zone
- 31 Touchdown Zone
- 5 Touchdown Zone

The following image is a current general location of all sensors and master stations with the current system. The west sensors (RWY 13, 9, and 5) are connected to the west station, and the east (RWY 27 and 31) are connected to the east station. This represents the current in-ground cable pathways to available pavement locations. Cables are trenched/pulled to ground vaults at intermediate locations off runway and are hand buried from there.



Installation and maintenance

- Vendors must provide a detailed installation plan, including estimated timelines and strategies for minimizing operational disruptions.
- The proposal must outline a clear strategy for the safe removal and disposal of all components from the old RWIS system in compliance with environmental regulations.
- A detailed maintenance plan including periodic inspections, recalibration schedules, and software updates (if applicable), must be provided.
- On-site training for airport personnel on system operation, troubleshooting, and routine maintenance is required.
- Vendors must offer a warranty period covering both hardware and software, with options for extended service agreements.

Proposal Submission Requirements

Interested vendors must submit a proposal that includes:

- Company background and relevant experience
- Detailed description of the proposed RWIS solution
- Hardware and software specifications including screenshots and feature examples
- Proposed sensor placement plan
- Installation and training plan
- Maintenance and support plan

- Cost breakdown, including installation, hardware, software, parts/labor, and ongoing support
- References from previous airport RWIS locations
- Project timeline, including key milestones from contract award to final acceptance

Vendor Selection

The MAA will review all submitted proposals and determine which respondent(s) meets the needs of the airport’s strategic objectives. As these needs may be served by multiple combinations, it will be the sole discretion of the Authority to determine which solution best serves the Quad Cities International Airport.

The Quad Cities International Airport recognizes that there may not be one perfect partner that meets all the needs. This RFP process is intended to help the MAA understand the costs and expectations involved with the replacement of the RWIS platform, and to determine if one or more vendors are needed. Respondents are encouraged to provide the clearest understanding of their capabilities and limitations as possible, so that the MAA can determine if those capabilities fit into the overall strategy. Noted limitations in the RFP response, or absence of areas requested in the RFP, should not be considered a disqualification.

RFP Response Process

RFP Timeline

- March 17, 2025 – RFP Released to public
- March 28, 2025, 4:30PM CST – Deadline for questions regarding the RFP to be submitted to RFPs+RWIS@qcairport.com (questions will not be accepted nor answered after this time.
- March 31, 2025 4:30PM CST – All submitted questions will be answered and posted on the website: <https://www.qcairport.com/airport-business-home/airport-authority/public-notices-rfps/> NOTE: We will not respond directly to questions from submitters. All answers will be posted on the website.
- April 17, 2025, 4:30PM – Deadline to submit an RFP response to RFPs+RWIS@qcairport.com. Late submissions will not be accepted.
- April 21 through May 23, 2025 – RFP response evaluations, follow-up questions with respondents, potential contract negotiations.
- July 1, 2025 – Target start date of new contract(s).

Questions regarding this RFP should be directed to RFPs+RWIS@qcairport.com and be submitted no later than March 28, 2025, 4:30PM CST. No individual at the airport should be contacted outside this email and timeline for information regarding this RFP, and any such action may negatively impact that vendor’s standing in regard to the selection process. Answers to any questions will be posted on the website by May 11, 2025 at 4:30PM CST.

All RFP responses should be directed to RFPs+RWIS@qcairport.com with the subject line containing “RWIS” at the beginning, prior to April 17, 2025, 4:30PM. Only written responses in the following computer document formats will be accepted: Microsoft Word (DOCX), Adobe PDF (PDF).

RFP respondents will be contacted after April 17 for any supplemental information, demonstrations, etc., if necessary. All respondents will be notified of standing by June 17.

Additional RFP Terms and Conditions

Please note the following additional terms and conditions of this RFP:

- The Metropolitan Airport Authority respects the confidentiality of every RFP response. Response information will not be shared with anyone outside of the RFP evaluation process and specifically not with other vendors without the express permission of the respondent.
- The Metropolitan Airport Authority reserves the right to adjust the schedule and RFP process at any time, provided public notice of this change is made.
- The Metropolitan Airport Authority may or may not enter contract negotiations with any respondent because of this RFP. It is the intent of the Metropolitan Airport Authority to satisfy its IT goals and needs and will do so at its discretion.