

**NOTICE TO AIRPORT CONSULTANT ENGINEERS
REGARDING A REQUEST FOR LETTERS OF INTEREST**

**October 14, 2021
(Aeronautics Division)**

The Tennessee Department of Transportation (TDOT) Aeronautics Division, an Equal Opportunity/Affirmative Action Employer, seeks to retain the services of an airports consultant engineering services firm to perform an **Airport Pavement Management Program (PMP)** update as described below.

Scope of Work

Pavement Management Program (PMP)

One (1) consultant will be selected to assist the TDOT Aeronautics Division with collecting, analyzing, maintaining, and reporting pavement data for approximately 70 general aviation facilities Statewide. A detailed draft scope of services is included in Attachment 'A'.

Contract Term, Maximum Contract Amount, and Method of Payment

Compensation Ceiling: To be determined. In no event shall the maximum contract amount exceed \$1,000,000.00.

Proposed Contract Time: Three (3) YEARS

Proposed Contract Payment Type: Fixed Lump SUM

Tentative Notice to Proceed Date: March 1, 2022

Technical Requirements

Applicable Federal and State statutes, regulations, rules, orders, standards, specifications, and policies must be satisfied in the performance of aviation planning and professional engineering services tasks. The most notable include:

- FAA Advisory Circular 150/5380-7B Airport Pavement Management Program
- FAA Advisory Circular 150/5370-11B, Use of Nondestructive Testing Devices in the Evaluation of Airport Pavements.
- FAA Advisory Circular 150/5335-5D, Standardized Method of Reporting Pavement Strength – PCR (Draft)
- ASTM D5340-20, Standard Test Method for Airport Pavement Condition Index Surveys

Personnel Requirements

The following requirements must be met by the Prime Consultant at the time of submittal:

1. At least one Principal of the Prime Consultant must be a Professional Engineer registered in the State of Tennessee.
2. At least one Principal or a responsible member of the Prime Consultant must be a professional Civil Engineer registered in the State of Tennessee.
3. In addition to the above, at least one Principal or Responsible Member shall have had a minimum of five years of experience in airport pavement evaluation.

Submittal Requirements

Firms may request consideration by submitting a letter of interest (LOI). These may be submitted to:

**Mr. William Burney, P.E.
Senior Project Manager
7335 Centennial Blvd
Nashville, TN 37209**

**Or electronically by email to:
William.burney@tn.gov**

All letters of interest must be received on or before **4:00 p.m. (Central Time) October 29, 2021**. For additional details regarding these projects, please contact Mr. John-Paul Saalwaechter at (615) 741-0780 or by email at John.saalwaechter@tn.gov.

All firms must be pre-qualified or have a completed prequalification form filed with the TDOT by the deadline for Letters of Interest. Additional information, including the Prequalification Form ([DT-0330, Part 1](#)), and an example letter of interest can be found at: <https://www.tn.gov/tdot/business-redirect/consultantinfo/consultantinfo-forms.html>.

Interested firms without internet access may obtain this information by calling Ms. Chris Smotherman at (615)741-4460 or Christine.Smotherman@tn.gov. The letter of interest shall not specifically identify sub-consultant(s), but rather indicate the scope of services anticipated to be completed by any sub-consultants. The sub-consultant shall be one that is prequalified by the TDOT to perform the specific tasks required. A pending prequalification status will be acceptable. **Please include a valid email address and phone number for the point-of-contact.**

Evaluation Process

Phase I Evaluation

The Department will evaluate the current prequalification statements on file for those submitting letters of interest and choose several firms who appear to be viable candidates, from which to invite proposals. Please note: New or updated prequalification forms must be received before the deadline for letters of interest. The criteria that will be considered are:

- i. Work experience in the required disciplines: Experience Categories (annual average revenue for last 5 years in relevant Profile Codes (A05, A06, P15, and T02).
- ii. Specialized expertise in the field of airport pavement management.
- iii. Qualification Type: UNLIMITED.

Phase II Evaluation

Phase II involves submitting [Form DT-330 Part II](#) (Contract Specific Qualifications). Please note that a new section (Section H) for TDOT overhead rate approval letters and sub-consultant commitment letters has been added. It shall be the responsibility of the prime consultant to include a signed statement from each sub-consultant on their own letterhead confirming that they have the staff available and agree to provide the necessary services for the specific item/project. For firms submitting proposals during Phase II evaluation, the criteria that will be considered are:

Criteria and Relative Weights	
i. Proposed Team member expertise (Sections C, D, & E of Part II of the DT-0330 form).	40 %
ii. Relevant project or work experience (Sections F & G of Part II of the DT-0330 form).	40 %
iii. Technical problem-solving approach (as explained in Section I of Part II of the DT-0330 form).	20 %

Following Phase II evaluation, a minimum of three* firms deemed most qualified by the Consultant Selection Committee (CEC) will be recommended to the Commissioner in alphabetical order for Phase III evaluation.

* In instances where only two qualified consultants respond with proposals, the Department may proceed with evaluation and selection if it is determined that the solicitation did not contain conditions or requirements that arbitrarily limited competition.

Phase III Evaluation

From the list of firms determined by the CEC to be the most highly qualified firms to perform the solicited services, the Commissioner will rank the firms in order of preference.

Post Selection

The TDOT Aeronautics Division will then enter into negotiations with the firm deemed to be most highly qualified based upon the Commissioner's ranking. Before the invitation of cost proposals are made, a mutual understanding of the scope of work and all technical and administrative requirements of each proposed undertaking will be established with the prospective consultant. This may be accomplished by conference, phone, or correspondence as determined to be most appropriate by the Aeronautics Division. Instructions will be given regarding the method of compensation and the documentation needed to justify the proposed compensation.

Procurement Schedule

*Dates other than LOI submittal deadline are tentative and provided for information only.

- LOI submittal deadline – October 29, 2021 No Later Than 4:00 p.m. (Central Standard Time)
- Request for proposals – November 19, 2021*
- Project Proposal submittal deadline – December 10, 2021* No Later Than 4:00 p.m. (Central Standard Time)
- Final selection – January 28, 2022*
- Notice to Proceed – March 1, 2022*

Evaluation proceedings will be conducted within the established guidelines regarding equal employment opportunity and nondiscriminatory action based upon the grounds of race, color, religion, national origin, sex, creed, age, and disability. Interested certified Disadvantaged Business Enterprise (DBE) firms as well as other minority- and/or women-owned firms are encouraged to respond to all advertisements by TDOT. For more information on DBE certification, please contact the Civil Rights Office Small Business Development Program at (615) 741-3681. Details and instructions for DBE certification can be found at the following website: <https://www.tn.gov/tdot/civil-rights/small-business-development-program.html>.

Clay Bright
Commissioner

CB/MF/JPS

Attachment A – Draft Scope of Services

Aeronautics Division

TDOT

October 6, 2021

As Tennessee’s aviation system faces increasing limitations on funding for capital improvement projects, it is imperative to have a solid pavement management program (PMP) that assists airports in finding optimum strategies for maintaining pavements in a safe, serviceable condition over a given period for the least cost. The scope of this project requires the Consultant to visit all public-use general aviation airports in Tennessee to determine existing pavement conditions in accordance with the Federal Aviation Administration (FAA) Advisory Circular 150/5380-7B – *Airport Pavement Management Program (PMP)* and ASTM D5340-20 – *Standard Test Method for Airport Pavement Condition Index Surveys*. The collected inventory and pavement condition index (PCI) data will be used to prepare maps, update pavement management data and tools, develop multi-year maintenance and rehabilitation plans, and produce project reports.

The Consultant shall perform airport pavement inspections, to update TDOT’s Airport Pavement Management Program/System (APMP or APMS) and provide electronic reports in a searchable PDF format for individual airports and for the statewide airport system. Work history updates will be required over time to incorporate the latest available data. There are **70** paved General Aviation airports to be covered under this management plan.

All pavement network definitions, sampling units, photographs shall be GIS enabled for displaying on a map.

The following is a summary of the basic tasks and special tasks under this contract that will be required of the Consultant (excluding unforeseen as-needed tasks that would be contracted through separate work orders).

Basic Tasks

Task 1.0 Records Review

The objective is to conduct a review of the records to determine pavement structure and age. Information pertaining to the pavement history, as well as information concerning the physical layout of the pavement system, will be obtained. This work will concentrate on pavement maintenance, rehabilitation and new construction that has occurred at each airport since it was last inspected in the previous PCI study.

Task 2.0 Pavement Network Definition Update

Airport mapping will be updated to identify the current location of branches, sections, and sample units. Since recommendations for pavement maintenance and rehabilitation are made at the section level, it is important that the sections identified in the current data represent areas where pavement repair work would realistically be applied. The electronic CAD network definition map files developed during the previous PCI study will be supplied by TDOT. For new airports included in the APMP for the first time, the Consultant shall develop those maps. These include Johnson City Airport (OA4) and John C. Tune Airport (JWN).

Task 3.0 Pavement Condition Survey

The pavements will be inspected using the PCI procedures as outlined in the ASTM Standard D5340-20, *Standard Test Method for Airport Pavement Condition Index Surveys* and the FAA Advisory Circular 150/5380-7B – *Airport Pavement Management Program (PMP)*. Additionally, photographs of representative pavement conditions and typical distresses observed in each section will be collected during the inspection.

Condition Survey Schedule

The Consultant shall inspect all applicable airports of the project by July 1, 2022. This approach will permit the overall conditions and needs of the pavements to be captured in a common and compressed timeframe. TDOT recognizes this schedule is contingent upon receiving a timely a Notice to Proceed (NTP).

Task 4.0 Data Update

The existing pavement data will be updated with the inventory, work history, and PCI data collected during earlier project tasks. The data entered will be verified through a process of basic data entry checks followed by “reality” checks. The “reality” checks consist of a review of items such as last construction dates versus pavement condition and the standard deviation of different sections.

Task 5.0 Aviation Toolset Customization

The APMP database shall be customized to more accurately reflect the priorities and policies under which the state of Tennessee Aeronautics Division operates. The customization will involve updating the pavement performance models, maintenance policies, prioritization guidelines, and unit cost information contained in the APMP. A report/deliverable shall be prepared that outlines the chosen priority and policy decisions and framework.

Additionally, the customization shall include the City, Grand Division within Tennessee (East, West, Middle), Tennessee Aviation System Plan (TASP) classifications, and FAA NPIAS airport classifications for each airport.

Task 5.0 Unit Cost Analysis Report

A Unit Cost Analysis Report shall be prepared to establish the unit costs used to determine the total estimated costs for localized preventive maintenance, surface treatments, and major rehabilitation and reconstruction. The report will include descriptions and unit costs for standardized repairs. Unit costs shall be determined on a Grand Division basis for both pay items and for the various repair methods. TDOT will provide bid tabs for pavement projects completed during the past 4 years to assist in the development of unit costs.

Task 6.0 APMP Toolset Update

An updated PAVER database and updated CAD map files of each airport shall be provided to TDOT. This includes the update of the existing PAVER database to the most current version of the software.

Task 7.0 Data Analysis

Data analysis will include the evaluation of the distress data (composite index, cause of deterioration, and rate of deterioration), a statewide needs analysis, the identification of the level of repair required and the timing of these activities, and the development of a five-year pavement repair program. The statewide needs assessment shall include an analysis of the overall statistics on the condition of airport pavements. The condition of the pavement sections – current and projected future – will then be used to identify pavement maintenance and rehabilitation (M&R) needs. The information obtained during the pavement condition analysis and the statewide needs assessment shall be used to facilitate the formulation and prioritization of M&R projects over a 5-year plan for different budget scenarios. Each plan shall present a list of pavement M&R projects by each year.

Task 8.0 Individual Airport Reports

Individual Airport Reports shall be prepared that will contain the pavement inventory and network definition, pavement evaluation procedures and results, a section on monitoring pavement condition, and a summary. Each report will contain appendices that include inspection photographs, inspection reports, and a detailed work history report. The final version of each report shall be provided in electronic format only.

Task 9.0 Statewide Summary Report and Executive Summary

A statewide Summary Report shall be prepared that will contain the results of the analysis, including annual maintenance programs, multi-year pavement rehabilitation programs, and network level budget plans for five different budget scenarios. The Consultant will complete the following budget scenarios: no funding, unlimited funding, and three constrained budgets to be determined at a later date. This report shall include an electronic form that TDOT and airports can use going forward to ensure they are collecting the correct information as pavement-related projects are completed. It shall provide detailed information on overall findings and M&R recommendations. The final version of the report shall be provided in electronic format only.

A companion Executive Summary shall also be provided in electronic format only.

Task 10.0 Web-Based Interactive Data Tool

A web-based software tool that supplements PAVER shall be provided that will allow public access to pavement-related data, without the need for software licensing. This will help to disseminate the results of the study to all stakeholders including the general public. This tool shall be hosted by the Consultant. Where applicable, the tool should include airport filters to customize viewers or data.

The tool shall include pavement inventory, work history, inspection distress and condition data, color-coded PCI maps, photographs taken during the inspection, current and predicted future pavement condition data, and the

Attachment A – Draft Scope of Services

Aeronautics Division

TDOT

October 6, 2021

M&R plan for each airport will be incorporated into this program for easy retrieval of project information. The data for all of the information outlined in the previous sentence for all airports included in the scope of work shall be available within 3 months of completing the surveys, with the exception of the M&R plan which shall be included within 6 months after completing the surveys. The tool must also be capable of including document access.

Task 11.0 PAVER Training

Training on the use of PAVER shall be conducted for TDOT Staff. This will be a high-level training course. This training will occur within 1 year of a Notice-to-Proceed.

Task 12.0 Work History Updates

Periodic Work History updates shall be made to the database as-needed during the agreed upon duration of the contract or during the use of a consultant hosted web-based interactive data tool. The duration will be a minimum of three years but will not exceed five years.

Special Tasks

Task 14. 0 Budget Analysis and Project Planning Tool

A dynamic budget analysis and project planning tool shall be provided that enables TDOT to input various funding allowances to generate lists of prioritized projects over a multi-year timeframe based on the calculated M&R needs. The tool shall not only indicate the projected annual cost of planned projects but also the amount of annual deferred M&R needs. The tool shall provide future PCI predictions for the system that would result if planned projects were implemented.

Task 15.0 Statewide Pavement Removal Report

A report shall be prepared of all airfield pavement areas that are not included in the network definitions and are candidates for removal and replacement with topsoil and seeding. The report will include the pavement areas, maps of the areas, and estimated removal and replacement costs for each applicable airport. A statewide summary shall also be provided that include quantities and estimated costs.

Task 16.0 PCR Reports

A PCR report shall be developed for 36 of the General Aviation airports in accordance with FAA Draft Advisory Circular (AC) 150/5335-5D, Standardized Method of Reporting Pavement Strength – PCR, or latest applicable FAA guidance at the time of report development. Each of these airports has an existing PCN report that will be made available to the consultant.

Task 17.0 Seal Coat Performance Impact Assessment

An assessment shall be performed to evaluate the level of impact that seal coating pavements under the State Airfield Pavement and Marking Maintenance contract has had on pavement condition ratings and deterioration. 2019 PCI ratings shall be compared to 2022 PCI ratings and used to develop new performance models. Additional analysis will be determined at a later date.