

Source: FHWA.

The Long-Term Infrastructure Performance (LTIP) Student Data Analysis Contest Encourages Undergraduate and Graduate Students to Use Pavement or Bridge Data to Research Topics in These Areas and Explore a Career in Pavement or Bridge Engineering.

The Federal Highway Administration (FHWA) is pleased to announce the LTIP Student Data Analysis Contest. The contest is designed to encourage university students to use pavement or bridge performance data to study the various factors affecting pavement and bridge lifecycles and to develop a technical paper to document their research.

### **Contest Details**

The contest's goal is to encourage university students to use data from the Long-Term Pavement Performance (LTPP) web portal, <u>LTPP InfoPave™</u>, or the Long-Term Bridge Performance (LTBP) web portal, <u>LTBP InfoBridge™</u>, for the analysis. The intent is to introduce potential future transportation engineering professionals to using quality performance data, applying that data by using the appropriate research methods to derive recommendations, and using that data to make informed decisions.

## **Eligibility and Guidelines**

The LTIP Student Data Analysis Contest is open to undergraduate and graduate students who are enrolled in degree-granting programs that support pavement or bridge curricula and research, including, but not limited to, engineering, planning, statistics, materials, computer science, and economics.

Current undergraduate and graduate and students are encouraged to prepare technical papers for the competition based on the use of <u>InfoPave</u> or <u>InfoBridge</u> data. The data could also include the data for class projects, graduate thesis, and dissertation projects. Individuals who have graduated from a program within 6 months before the submission date are also eligible if the paper that they submit is based on work conducted as part of the program.

The following requirements must be met by all contest applicants.

#### **Eligibility**

Applicant(s) must be enrolled in a college or university in the United States as an undergraduate or graduate student during the application submittal year.

#### **Topic**

Students must use <u>LTPP InfoPave</u> or <u>LTBP InfoBridge</u> data to investigate a topic that advances pavement or bridge performance. Applicants may also use data from other sources—such as State departments of transportation (DOTs), local government agencies, and transportation research institutions—to support their analyses. However, InfoPave or InfoBridge must be the primary source of data used to perform the analyses. Students are encouraged to come up with their own innovative topics.

Suggested topics for pavement papers include "Evaluate a Question or Concern for a Region or State," "Visualization of Performance Data," and "Development of Models to Predict Future Condition Using the LTPP Pavement Condition and Traffic Data."

Suggested topics for bridge papers include "Condition Forecasting Models," "Trends and Performance History of Different Bridge Types," and "Role of Preservation in Extending Service Life of Bridges."

#### **Original Research**

At least 75 percent of the paper's content shall be new and original. The remaining 25 percent of the content may be referenced or reproduced with proper attribution to previously published work.

# **Individual or Group Work**

Submissions by individual students or groups of students will be considered. Teams must define one lead student and contributing students for the project. Students are also encouraged to partner with State DOTs and private consultants; however, the student(s) must conduct the analysis and the lead author must be a student. Faculty members may participate in an advisory role and be a coauthor of the paper.

Note: Most of the <u>InfoPave</u> and <u>InfoBridge</u> data can be directly downloaded. Some data will need to be requested from the <u>LTIP</u> <u>Customer Support Service Center</u>. The turnaround time for the requested data is normally less than 1 week; however, the time needed to conduct an analysis of the data may vary per project. Please be sure to plan accordingly and in advance of the paper submission deadline.

## **Contest Recognition**

The following table lists the recognition that will be given to the student winners for each of the pavement and bridge paper submittals. Travel reimbursement and Transportation Research Board (TRB) conference registration are subject to FHWA rules, regulations, and approval at time of contest.

Award Package	1st Place	2nd Place	3rd Place
Recognition at the TRB 2023 Annual Meeting January 2023, Washington, D.C. Student author(s) will be acknowledged and receive an award certificate.	<b>✓</b>	<b>√</b>	<b>√</b>
<b>Registration</b> Will be provided to only the lead author for the TRB 2023 annual meeting.	✓	<b>√</b>	
Lodging (2 nights) Will be provided to only the lead author to attend the TRB 2023 annual meeting.	<b>√</b>	<b>√</b>	
Roundtrip, domestic airfare Will be provided to only the lead author to attend the TRB 2023 annual meeting.	<b>✓</b>	<b>√</b>	
Paper published by FHWA	✓		

#### Paper Requirements and Deadline

The length of each paper must not exceed 7,500 words, including the abstract, text, references, and tables. Each table counts as 250 words. Papers must be in Adobe® Acrobat™ PDF file format. The formatting details are available on the InfoPave and InfoBridge web portals. Papers not meeting the requirements may be rejected without review.

Submit papers by email to <a href="mailto:ltipstudentcontest@dot.gov">ltipstudentcontest@dot.gov</a> by Friday, July 29, 2022, 11:59 p.m. EDT.

### **Resources**

The <u>LTPP InfoPave</u> and <u>LTBP InfoBridge</u> web portals have short videos that describe how to navigate the portals. In addition, the following links (also on the portals) provide historical and current information about the LTPP and LTBP programs:

- About LTPP InfoPave
- About LTBP InfoBridge
- <u>LTPP Program Book</u>
- LTPP Program Brochure
- LTBP Program Brochure
- Winners of Previous Contest (InfoPave or InfoBridge)

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