

Transportation Technology Tournament

Transportation Agency Challenge Problems

Overview

The National Operations Center of Excellence (NOCoE) and the U.S. DOT ITS JPO PCB program are hosting the second annual competition for students to work directly with state and local DOTs to solve real-world transportation problems utilizing ITS and TSMO solutions.

We're asking transportation agencies to submit challenge problems around real-world transportation challenges you're facing and to allow students to work together on providing solutions for that problem.

Tournament Process

After submitting an initial contest application identifying the team and the chosen challenge problem, students will work with academic advisors to learn about potential ITS and TSMO solutions via online training programs. Teams will then utilize their experience, education, and new coursework to develop a solution or suite of solutions to directly address the originally-defined challenge problem. Students will submit their solutions via a proposal. Finalist teams will develop a presentation and then will be flown to participate in a live event at [ITE 2019 Annual Meeting in Austin, TX](#) where they will give a presentation in front of a panel of judges made up of leaders in the ITS and TSMO community. A team will then be selected as the 2019 Transportation Technology Tournament Winner.

The 2018 Tournament featured nine teams, four of whom were chosen as finalists to compete in the live event at ITE 2018 Annual Meeting. More information on that event and the teams, [is available here](#).

Challenge Problems Guidance

A good challenge problem will feature a specific real-world issue facing your agency which ITS or TSMO could address. Identifying specific intersections, roadways, or other aspects of your system help students with the real-world aspect of this, exposing them to constraints and limitations of a real-world environment. Given the timeframe of the tournament it should be expected that students will only develop 1-3 solutions (applications, strategies, etc.) to address the problem. Additionally, we're looking for you to first identify the problem with a brief description, but a meeting with students at the tournament starts will help guide them more alongside your thinking. An overview of challenge problems from last year is available [here](#).

Expectations for the Agency and Students

An agency's challenge problems will be posted on the [tournament website](#) ahead of the February 1, 2019 application deadline. Student teams will select challenge problems when they apply to participate in the tournament, however we'll limit the number of teams addressing each challenge problem to two teams. We'll put student teams in contact with the agency of their chosen problem for an initial discussion. We expect the team will reach out again before submitting the Solution Definition and High-Level Con-Op on April 30. However, we do not expect the agency to instruct or work side-by-side with the students. Our goal is to foster a relationship that simulates a potential client or customer, whereby they understand the problem and provide their own unique solution.

To submit a challenge problem for the tournament, please email Adam Hopps at ahopps@transportationops.org.