**Lesson Plan Subject: Algebra/Geometry/Physical Science** (9th-12th grades)

**Lesson Focus:** Intro to the Transportation Profession **Time:** 15-30 minutes

Presentation by Dr. Mike Golias, mihalisgolias@yahoo.com

 and Dr. Stephanie Ivey, ssalyers@memphis.edu

**Guiding Question, Course/Grade Level Expectations, and SPI’s** are included for Physical Science, Biology, Physics, Algebra 1, Algebra 2, and Geometry. (**See the** **Standards Tab**.)

**Materials:** PowerPoint Presentation Intro to Transportation Engineering (See Tab)

**Preparing the lesson:**

1. Review the PowerPoint

2. Contact Dr. Golias or Dr. Ivey for additional information or to schedule a guest speaker.

**Teaching the Lesson:**

1. Prior to students performing the activities included in this collection, use the PowerPoint to discuss the scope of the transportation profession.
2. As a team, have students make a list of vehicle characteristics and passenger characteristics that would need to be considered when designing a vehicle.
3. List a few of the characteristics from each group on the board and discuss the factors that are important when designing a roadway.

**Closing Activity or Extension:** Have students do additional research on career opportunities in Transportation Engineering or other branches of Civil Engineering AND/OR

Continue with Car Competition (Phase 1).