James R. Valles, Jr.\* (jrvalles@pvamu.edu), Department of Mathematics, P. O. Box 519 – Mailstop 2225, Prairie View, TX 77446-0519, and Natali Hritonenko. Doing Calculus to Learn Calculus. Preliminary report.

According to A Common Vision for Undergraduate Mathematical Sciences Programs in 2025, instructional delivery via active learning models, such as simulations, reading, writing, or problem solving, should be the primary method used (as opposed to lecturing). With this in mind, we worked on a project to create calculus lessons designed to provide real-world applications and modeling for calculus students. The project was based on current trends in science and technology to make calculus more engaging and more relevant, thus inspiring deeper critical thinking and active learning. Some lessons created will be discussed as will future directions that can be pursued. (Received September 17, 2019)