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Ralph E. Chikhany*, Department of Mathematics and Statistics, Washington State University, Pullman, WA 99164-3113, and **William L Hall**, Department of Mathematics and Statistics, Washington State University, 99164-3113. *Business Calculus Students' Understanding of Marginal Functions*. Preliminary report.

Business majors represent a significant proportion of the population of students enrolled in calculus at the college level. However, there is a lack in research literature that tackles the teaching and learning of business applications at this level. This pilot study represents the beginning phases of a project that aims to investigate business students' reasoning through tasks pertaining to marginal analysis (derivatives in a business context), accumulation functions and Riemann sums. A preliminary analysis of interviews with two pairs of students is presented, with an emphasis on their thought process while answering questions related to cost, revenue and profit functions as well as their marginal counterparts. The context-based activities were designed with a realistic mathematics education perspective, motivated by guided reinvention. (Received September 17, 2018)