A major impediment to retention of students in STEM fields (especially women and minorities) is the successful completion of the necessary math courses for their major. In community colleges, a significant number of individuals require remedial math and can take several years to reach Calculus I, a necessary course for most STEM majors. In 2019 The National Science Foundation (NSF) S-STEM grant “Mathematics Acceleration for STEM Students” (MASS) was awarded to The Community College of Baltimore County (CCBC) with the goal of improving retention and success of students in STEM fields by accelerating them through the required math courses to or through Calculus I in a year. Students who receive the scholarship become part of a larger organization known as STEM Core. STEM Core was developed by Growth Sector, a California based non-profit devoted to opening STEM careers to students from low-income backgrounds and one of the major components of STEM Core is the mathematics acceleration. In this talk I will focus on the challenges we have faced and the opportunities we have found in recruiting students for this grant, the use of accelerated math classes as a means of cohort building and what the data say so far in terms of retention of our STEM students. (Received September 13, 2020)