Yuju Kuo* (yjkuo@iup.edu) and Rick Adkins (fadkin@iup.edu). NSF S-STEM - Creating Opportunities for Applying Mathematics. Preliminary report.

Building on prior S-STEM awards providing 120 scholarships, NSF-funded Scholarships-Creating Opportunities for Applying Mathematics (S-COAM) project establishes a supportive connection of master's students with undergraduates, engages them in cohort activities, encourages research and internship opportunities, provides conference travel support, offers hands-on technology workshops, empowers students to pursue advanced math courses, and connects students with mentors and external speakers. New initiatives include building a pipeline of STEM students via focused minority recruiting; supporting success through peer-led learning, linked curricula and research; and studying how formation of mathematics identity enhances persistence in STEM. Working closely with Admission Office, minority students are contacted for scholarship cohort opportunities. This comprehensive approach is expected to improve recruitment, retention, mathematical training, and career preparation for women, minorities, economically disadvantaged, rural, and first-generation students resulting in more graduates ready to conduct research and pursue advanced STEM studies or careers. (Received September 24, 2018)