AnchorSTEM is a new S-STEM project that focuses on University of San Diego’s role of Anchor Institution by building on the structures from past S-STEM projects, while sustaining and strengthening partnerships with pre-college serving community organizations to establish a reciprocal, ongoing mechanism to support the retention, graduation and success in Mathematics, Engineering and Science of local “Rising Stars” (students with financial need, especially those from underrepresented groups in STEM). Through this project, we are developing, implementing and evaluating a collaborative program to recruit and advance a diverse group of STEM majors by placing the community front and center. We recognize that (a) where students come from and the assets they bring are important, (b) it takes the whole community working together to advance each member, and (c) retaining and strengthening student ties with community and family helps them succeed in college. In this session, we will share lessons learned in previous projects and how they shaped the development of this new project, as well as our first insights from work on Project AnchorSTEM. This project is funded by NSF’s Scholarships in Science, Technology, Engineering, and Mathematics program. (Received September 16, 2020)