Girls Learning and Exploring Applications of Mathematics (GLEAM) was a Saturday enrichment program for middle school girls in high-diversity schools in Minneapolis/St. Paul, Minnesota, that ran in AY 2018-’19 and ’19-’20. We recruited middle school teachers and undergraduate teaching assistants to work with the program, and we worked with these teachers to help recruit students from their school. Our outreach model prioritized the role of partner teachers as essential facilitators in reaching out to their students and providing a trusted foundation for learning new and fun topics. In this talk we will discuss program logistics as well as challenges and victories we encountered along the way. (Received September 15, 2020)