This session summarizes the activities and results of Phase I the Houston Louis Stokes Alliance for Minority Participation. The original proposal for support under the NSF L-SAMP Program focused on one primary goal, namely, to double the number of under-represented minority students receiving bachelor’s degrees in science, technology, engineering, and mathematics (STEM) majors in five years. The data for Phase I show that this goal has been nearly realized in the Houston project. The H-LSAMP came within 5 percent of achieving the goal of doubling the total number of STEM degrees awarded to minority students during Phase I. These results indicate that participating institutions have been successful at both recruiting and retaining minority students in its STEM majors, including mathematics. Moreover, Phase I data show a marked increase in the number of H-LSAMP students who have gone on to advanced degrees over the past five years. In addition, there is an increase in the number of students successfully matriculating from the two-year colleges and making timely progress towards degree completion. These results also imply that participating institutions have developed and implemented successful approaches to supporting minority student achievement. (Received September 16, 2008)