Since their beginnings in 2006, Math Teachers’ Circles have grown to more than 80 sites in 37 states. What impact are these groups having on the estimated 1,500 teachers and 300 mathematicians who participate? We review evidence from the first decade of Math Teachers’ Circles and present key results suggesting that participating teachers benefit in a variety of ways. These include increased excitement about mathematics, mathematical knowledge for teaching, use of inquiry-oriented practices in the classroom, and professional engagement. Case studies suggest that for those who are ready, Math Teachers’ Circles can serve as a catalyst to change their pedagogical practices or take on professional leadership roles. Many teachers report that Math Teachers’ Circles transform how they see mathematics, with potentially important implications for their students. Though less studied, mathematicians also report a positive professional impact of their involvement with the program. Taken together, the evidence points to broad and lasting effects of Math Teachers’ Circles on their participants’ mathematical and professional lives. (Received September 22, 2015)