The Baltimore Police Department’s six-month Aerial Investigations Research (AIR) pilot began on May 1, 2020, and continued until October 31, 2020. The AIR pilot was designed to support police investigations of serious violent crime by providing continuous overhead imagery of the city collected by airplanes with powerful cameras circling above the city. RAND was hired by Arnold Ventures, the organization funding the AIR program, to evaluate the program’s implementation and its effectiveness for improving police clearance rates and reducing violent crime in Baltimore. In this interim report, we describe the program’s implementation challenges, the investigations it supported, a survey of detective’s experiences with the AIR program, and a comparison of clearance rates for cases that were supported by the AIR program and similar cases that were not supported by the AIR program. This is an ongoing evaluation project. Final effectiveness analyses will not be available until the Spring of 2022.