Extensive airborne gravity surveys have been conducted as a part of the Gravity for the Redefinition of the American Vertical Datum (GRAV-D) project by the U.S. National Geodetic Survey. The intent is to capture the mid-wavelengths of the gravity field over all of the U.S.A. GRAV-D bridges the gap between long wavelengths determined by satellite gravity missions and shorter wavelengths determined from surface observations as well as forward-modelling of surface density and elevation models. The GRAV-D surveys were collected in 10-km spaced profiles covering 400-500 km patches, which are adequate in scale to compare to Earth Gravity Models through about degree 90. Initial comparisons with EGM2008 revealed no detectable slope across these patches, supporting the idea that no significant long wavelength differences exist between the aerogravity and the GRACE satellite data on which EGM2008 is based. However, only half the signal in EGM2008 is from satellite data at degree 95; indicating that a strict comparison of GRAV-D to the GRACE gravity field is less than exact. With the release of the GOCE data, higher resolution EGM's based entirely upon satellite gravity models make this comparison a more direct assessment of the long to intermediate quality of the aerogravity. This will enable generation of an EGM with 20 km resolution (approximately degree 2000). In turn, this model will be combined with the existing terrestrial data to build a higher resolution model towards defining a cm-level accurate gravimetric geoid model to be used as a new vertical datum for the United States.