The bathymetric surveys were downloaded referenced to NAD 83 geographic, and therefore no horizontal transformations were required. The topographic and bathymetric datasets were originally referenced to NAD 83, and no transformations were made to the input data. The NGDC hydrographic, tidal, ellipsoid-based, geoid-based, and orthometric datums using calibrated hydrodynamic models. The vertical accuracy of the input data varied depending on the input source. Because the input elevation data were derived primarily from lidar, the vertical accuracy was generally high, ranging from 6 to 20 centimeters in root mean square error (RMSE). Topographic data varied depending on the input source. Because the input elevation data were derived primarily from lidar, the vertical accuracy was generally high, ranging from 6 to 20 centimeters in root mean square error (RMSE).

The horizontal datum of the Mobile Bay topobathymetric model is the North American Datum of 1983 (NAD 83), geographic coordinates. The vertical datum of the Mobile Bay topobathymetric model is the North American Vertical Datum of 1988 (NA VD 88). All the topographic and bathymetric data were originally referenced to NA VD 88 and no transformations were made to these input data. The NGDC hydrographic, tidal, ellipsoid-based, geoid-based, and orthometric datums using calibrated hydrodynamic models. The vertical accuracy of the input data varied depending on the input source. Because the input elevation data were derived primarily from lidar, the vertical accuracy was generally high, ranging from 6 to 20 centimeters in root mean square error (RMSE). Topographic data varied depending on the input source. Because the input elevation data were derived primarily from lidar, the vertical accuracy was generally high, ranging from 6 to 20 centimeters in root mean square error (RMSE).